FLUOR FERNALD CLOSURE PLAN BASIS OF ESTIMATE

PBS-08 NUCLEAR MATERIALS DISPOSITION

SEPTEMBER 2001

70000-PL-0008 REVISION 1

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Section 1: JNMS - Nuclear Materials Disposition Management

- 1.0 Narrative
 - 1.1 Overview
 - 1.2 Assumptions/Exclusions
 - 1.2.1 Assumptions
 - 1.2.2 Exclusions
 - 1.2.3 Government-Furnished Equipment/Services
 - 1.3 Drivers
 - 1.4 Project Physical Description
 - 1.5 Project Plan/Technical Scope and Quantification
 - 1.5.1 JNMSA NMD/UWD Planning and Characterization
 - 1) Task #1 Planning
 - 1.1)1 Plan/Scope Planning
 - 1.1)2 Quantification Planning
 - 2) Task #2 Project Controls
 - 2.1)1 Plan/Scope Planning
 - 2.1)2 Quantification Project Controls
 - 3) Task #3 Acquisitions
 - 3.1)1 Plan/Scope Acquisitions
 - 3.1)2 Quantification Acquisitions
 - 4) Task #4 Administrative and Technical Support
 - 4.1)1 Plan/Scope Administrative and Technical Support
 - 4.1)2 Quantification Administrative and Technical Support
 - 5) Task #5 Characterization
 - 5.1)1 Plan/Scope Characterization
 - 5.1)2 Quantification Characterization

1.5.2 JNMSB - Safety Assessment

- 1) Task #1 Safety Assessment
 - 1.1) Subtask #1 Safety Assessment
 - 1.1)1 Plan/Scope Safety Assessment
 - 1.1)2 Quantification Safety Assessment
- 2.0 Schedule
- 3.0 Manpower Plans
 - 3.1 NMD/UWD Project Management/Support
- 4.0 Estimate
- 5.0 Risk Plan

F08-001

Section 2: JNMP - Nuclear Materials Disposition

- 1.0 Narrative
 - 1.1 Overview
 - 1.2 Assumptions/Exclusions
 - 1.2.1 Assumptions
 - 1.2.2 Exclusions
 - 1.2.3 Government-Furnished Equipment/Services
 - 1.3 Drivers
 - 1.4 Project Physical Description
 - 1.5 Project Plan/Technical Scope and Quantification
 - 1.5.1 JNMPC Compounds
 - 1) Task #1 Planning
 - 2) Task #2 Packaging
 - 2.1) Subtask #1 Miscellaneous Depleted UF₄ Packaging
 - 2.1)1 Plan/Scope Miscellaneous Depleted UF4 Packaging
 - 2.1)2 Quantification Miscellaneous Depleted UF₄ Packaging
 - 2.2) Subtask #2 1% UO₃ (in 350-gram packages) Packaging
 - 2.2)1 Plan/Scope 1% UO₃ (in 350-gram packages) Packaging
 - 2.2)2 Quantification 1% UO₃ (in 350-gram packages) Packaging
 - 2.3) Subtask #3 Enriched UF4 Packaging
 - 2.3)1 Plan/Scope Enriched UF₄ Packaging
 - 2.3)2 Quantification Enriched UF₄ Packaging
 - 2.4) Subtask #4 Miscellaneous Enriched $< = 1 \% U^{235}$ Compounds Packaging
 - 2.4)1 Plan/Scope Miscellaneous Enriched < = 1% U²³⁵ Compounds Packaging
 - 2.4)2 Quantification Miscellaneous Enriched < = 1% U²³⁵
 Compounds Packaging
 - 2.5) Subtask #5 >1% U²³⁵ UO₃ (to be repackaged) Packaging
 - 2.5)1 Plan/Scope > 1% U²³⁵ UO₃ (to be repackaged) Packaging
 - 2.5)2 Quantification > 1 % U²³⁵ UO₃ (to be repackaged) Packaging
 - 2.6) Subtask #6 Shipping Compounds
 - 2.6)1 Plan/Scope Shipping Compounds
 - 2.6)2 Quantification Shipping Compounds
 - 1.5.2 JNMPM Metal
 - 1) Task #1 Planning
 - 2) Task #2 Processing
 - 2.1) Subtask #1 Processing Metal
 - 2.1)1 Plan/Scope Processing Metal
 - 2.1)2 Quantification Processing Metal

Section 2: JNMP - Nuclear Materials Disposition (Continued)

- 3) Task #3 Packaging
 - 3.1) Subtask #1 Normal and Depleted Metal Packaging
 - 3.1)1 Plan/Scope Normal and Depleted Metal Packaging
 - 3.1)2 Quantification Normal and Depleted Metal Packaging
 - 3.2) Subtask #2 Miscellaneous Enriched Metal Packaging
 - 3.2)1 Plan/Scope Miscellaneous Enriched Metal Packaging
 - 3.2)2 Quantification Miscellaneous Enriched Metal Packaging
 - 3.3) Subtask #3 Shipping Metal
 - 3.3)1 Plan/Scope Shipping Metal
 - 3.3)2 Quantification Shipping Metal
- 2.0 Schedule
- 3.0 Manpower Plans
 - 3.1 Compounds
 - 3.2 Metal
- 4.0 Estimate
- 5.0 Risk Plan

Section 3: JUWP - Uranium Waste Disposition

- 1.0 Narrative
 - 1.1 Overview
 - 1.2 Assumptions/Exclusions
 - 1.2.1 Assumptions
 - 1.2.2 Exclusions
 - 1.2.3 Government-Furnished Equipment/Services
 - 1.3 Drivers
 - 1.4 Project Physical Description
 - 1.5 Project Plan/Technical Scope and Quantification
 - 1.5.1 JUWPA Fissile Excepted and <1% Compounds
 - 1) Task #1 Planning
 - 2) Task #2 Characterization
 - 3) Task #3 Processing
 - 3.1) Subtask #1 Miscellaneous Depleted UF₄ Processing
 3.1)1 Plan/Scope Miscellaneous Depleted UF₄ Processing
 - 3.2) Subtask #2 Reject Normal Compounds Processing3.2)1 Plan/Scope Reject Normal Compounds Processing
 - 3.3) Subtask #3 Depleted Compounds/Trash Processing3.3)1 Plan/Scope Depleted Compounds/Trash Processing
 - 3.4) Subtask #4 $< = 1 \% U^{235}$ Enriched Compounds Processing 3.4)1 Plan/Scope $< = 1 \% U^{235}$ Enriched Compounds Processing
 - 3.5) Subtask #5 Reject $< = 1\% \ U^{235} \ U_3O_8$ Processing 3.5)1 Plan/Scope Reject $< = 1\% \ U^{235} \ U_3O_8$ Processing
 - 3.6) Subtask #6 Reject < = 1% U²³⁵ Miscellaneous Compounds Processing
 - 3.6)1 Plan/Scope Reject < = 1 % U²³⁵ Miscellaneous Compounds Processing
 - 3.7) Subtask #7 > 1% U²³⁵ Enriched Fissile Excepted Compounds Processing
 - 3.7)1 Plan/Scope > 1 % U²³⁵ Enriched Fissile Excepted Compounds Processing
 - 3.8) Task #3 Quantification
 - 4) Task #4 Packaging
 - 4.1) Subtask #1 Miscellaneous Depleted UF4 Packaging
 4.1)1 Plan/Scope Miscellaneous Depleted UF4 Packaging
 4.1)2 Quantification Miscellaneous Depleted UF4 Packaging
 - 4.2) Subtask #2 Reject Normal Compounds Packaging
 4.2)1 Plan/Scope Reject Normal Compounds Packaging
 4.2)2 Quantification Reject Normal Compounds Packaging
 - 4.3) Subtask #3 Depleted Compounds/Trash Packaging
 4.3)1 Plan/Scope Depleted Compounds/Trash Packaging
 - 4.3)2 Quantification Depleted Compounds/Trash Packaging

- 4.4) Subtask #4 < = 1% U²³⁵ Enriched Compounds Packaging
 - 4.4)1 Plan/Scope < = 1% U²³⁵ Enriched Compounds Packaging
 - 4.4)2 Quantification $< = 1\% U^{235}$ Enriched Compounds Packaging
- 4.5) Subtask #5 Reject $< = 1\% U^{235} U_3O_8$ Packaging 4.5)1 Plan/Scope - Reject $< = 1\% U^{235} U_3O_8$ Packaging
 - 4.5)2 Quantification Reject < = 1% U²³⁵ U₃O₈ Packaging
- 4.6) Subtask #6 Reject < = 1% U²³⁵ Miscellaneous Compounds Packaging
 - 4.6)1 Plan/Scope Reject < = 1% U²³⁵ Miscellaneous Compounds Packaging
 - 4.6)2 Quantification Reject < = 1 % U²³⁵ Miscellaneous Compounds Packaging
- 4.7) Subtask #7 > 1% U²³⁵ Enriched Fissile Excepted Compounds Packaging
 - 4.7)1 Plan/Scope > 1% U²³⁵ Enriched Fissile Excepted Compounds Packaging
 - 4.7)2 Quantification > 1% U²³⁵ Enriched Fissile Excepted Compounds Packaging
- 5) Task #5 Fissile Excepted and $\leq 1\%$ U²³⁵ Compounds Shipping
 - 5.1) Subtask #1 Fissile Excepted and $\leq 1\%$ U²³⁵ Compounds Shipping
 - 5.1)1 Plan/Scope Fissile Excepted and < = 1% U²³⁵ Compounds Shipping
 - 5.1)2 Quantification Fissile Excepted and < = 1% U²³⁵ Compounds Shipping
- 1.5.2 JUWPB Fissile Excepted and Depleted Metal
 - 1) Task #1 Planning
 - 2) Task #2 Characterization
 - 3) Task #3 Processing
 - 3.1) Subtask #1 Depleted Metal Processing3.1)1 Plan/Scope Depleted Metal Processing
 - 3.2) Subtask #2 Depleted Ingots and Derbies Processing (potentially pyrophoric)
 - 3.2)1 Plan/Scope Depleted Ingots and Derbies Processing
 - 3.3) Subtask #3 Enriched Fissile Excepted Metals Processing3.3)1 Plan/Scope Enriched Fissile Excepted Metals Processing
 - 3.4) Subtask #4 Reject Normal Metal Processing3.4)1 Plan/Scope Reject Normal Metal Processing
 - 3.5) Subtask #5 Reject Miscellaneous Depleted Metal Processing
 3.5)1 Plan/Scope Reject Miscellaneous Depleted Metal
 Processing

- 3.6) Task #3 Quantification
- 4) Task #4 Packaging
 - 4.1) Subtask #1 Depleted Metal Packaging
 - 4.1)1 Plan/Scope Depleted Metal Packaging
 - 4.1)2 Quantification Depleted Metal Packaging
 - 4.2) Subtask #2 Depleted Ingots and Derbies Processing (potentially pyrophoric)
 - 4.2)1 Plan/Scope Depleted Ingots and Derbies Processing
 - 4.2)2 Quantification Depleted Ingots and Derbies Processing
 - 4.3) Subtask #3 Enriched Fissile Excepted Metals Packaging
 - 4.3)1 Plan/Scope Enriched Fissile Excepted Metals Packaging
 - 4.3)2 Quantification Enriched Fissile Excepted Metals Packaging
 - 4.4) Subtask #4 Reject Normal Metal Packaging
 - 4.4)1 Plan/Scope Reject Normal Metal Packaging
 - 4.4)2 Quantification Reject Normal Metal Packaging
 - 4.5) Subtask #5 Reject Miscellaneous Depleted Metal Packaging
 - 4.5)1 Plan/Scope Reject Miscellaneous Depleted Metal Packaging
 - 4.5)2 Quantification Reject Miscellaneous Depleted Metal Packaging/Loading Crew
- 5) Task #5 Fissile Excepted and Depleted Metal Shipping
 - 5.1) Subtask #1 Fissile Excepted and Depleted Metal Shipping
 - 5.1)1 Plan/Scope Fissile Excepted and Depleted Metal Shipping
 - 5.1)2 Quantification Fissile Excepted and Depleted Metal Shipping
- 1.5.3 JUWPC RCRA Compounds, T-Hoppers and Sealed Sources
 - 1) Task #1 Planning
 - 2) Task #2 Characterization
 - 3) Task #3 Processing
 - 3.1) Subtask #1 > 1% U²³⁵ RCRA Compounds Processing 3.1)1 Plan/Scope > 1% U²³⁵ RCRA Compounds Processing
 - 3.2) Subtask #2 \leq 1% U²³⁵ RCRA Compounds Processing 3.2)1 Plan/Scope \leq 1% U²³⁵ RCRA Compounds Processing
 - 3.3) Subtask #3 RCRA T-Hoppers Processing3.3)1 Plan/Scope RCRA T-Hoppers Processing
 - 3.4) Subtask #4 Sealed Sources Processing3.4)1 Plan/Scope Sealed Sources Processing
 - 3.5) Task #3 Quantification RCRA Compounds, RCRA T-Hoppers, Sealed Sources Processing

- 4) Task #4 Packaging
 - 4.1) Subtask #1 >1% U^{235} RCRA Compounds Packaging
 - 4.1)1 Plan/Scope > 1% U²³⁵ RCRA Compounds Packaging
 - 4.1)2 Quantification >1% U²³⁵ RCRA Compounds Packaging
 - 4.2) Subtask #2 \leq 1% U²³⁵ RCRA Compounds Packaging
 - 4.2)1 Plan/Scope ≤1% U²³⁵ RCRA Compounds Packaging
 - 4.2)2 Quantification ≤1% U²³⁵ RCRA Compounds Packaging
 - 4.3) Subtask #3 T-Hoppers Packaging
 - 4.3)1 Plan/Scope T-Hoppers Packaging
 - 4.3)2 Quantification T-Hoppers Packaging
 - 4.4) Subtask #4 Sealed Sources Packaging
 - 4.4)1 Plan/Scope Sealed Sources Packaging
 - 4.4)2 Quantification Sealed Sources Packaging
- 5) Task #5 RCRA Compounds, RCRA T-Hoppers and Sealed Sources Shipping
 - 5.1) Subtask #1 > 1% U²³⁵ RCRA Compounds Shipping
 5.1)1 Plan/Scope > 1% U²³⁵ RCRA Compounds Shipping
 5.1)2 Quantification > 1% U²³⁵ RCRA Compounds Shipping
 - 5.2) Subtask #2 <1% U²³⁵ RCRA Compounds Shipping 5.2)1 Plan/Scope - <1% U²³⁵ RCRA Compounds Shipping 5.2)2 Quantification - <1% U²³⁵ RCRA Compounds Shipping
 - 5.3) Subtask #3 RCRA Compounds, RCRA T-Hoppers and Sealed Sources Shipping
 - 5.1)1 Plan/Scope <1% U²³⁵ RCRA Compounds, RCRA T-Hoppers and Sealed Sources Shipping
 - 5.1)2 Quantification <1% U²³⁵ RCRA Compounds, RCRA T-Hoppers and Sealed Sources Shipping
- 1.5.4 JUWPD Fissile Compounds
 - 1) Task #1 Planning
 - 2) Task #2 Characterization
 - 3) Task #3 Processing
 - 3.1) Subtask #1 > 1% U²³⁵ Enriched Compounds Processing
 3.1)1 Plan/Scope > 1% U²³⁵ Enriched Compounds Processing
 - 3.1)2 Quantification > 1% U²³⁵ Enriched Compounds
 - 3.2) Subtask #4 Reject > 1% U²³⁵ U₃O₈ Processing 3.2)1 Plan/Scope Reject > 1% U²³⁵ U₃O₈ Processing 3.2)2 Quantification Reject > 1% U²³⁵ U₃O₈
 - 3.3) Subtask #5 Reject > 1% U²³⁵ Miscellaneous Compounds Processing

- 3.3)1 Plan/Scope Reject > 1% U²³⁵ Miscellaneous Compounds Processing
- 3.3)2 Quantification Reject > 1 % U²³⁵ Miscellaneous Compounds
- 3.4) Task #3 Quantification Fissile Compounds Processing
- 4) Task #4 Packaging
 - 4.1) Subtask #1 > 1% U²³⁵ Enriched Compounds Packaging
 - 4.1)1 Plan/Scope > 1% U²³⁵ Enriched Compounds Packaging
 - 4.1)2 Quantification > 1% U²³⁵ Enriched Compounds Packaging
 - 4.2) Subtask #4 Reject >1% U²³⁵ U₃O₈ Packaging
 - 4.2)1 Plan/Scope Reject > 1% U²³⁵ U₃O₈ Packaging
 - 4.2)2 Quantification Reject > 1% U²³⁵ U₃O₈ Packaging
 - 4.3) Subtask #5 Reject >1% U²³⁵ Miscellaneous Compounds Packaging
 - 4.3)1 Plan/Scope Reject > 1 % U²³⁵ Miscellaneous Compounds Packaging
 - 4.3)2 Quantification Reject > 1% U²³⁵ Miscellaneous Compounds Packaging
- 5) Task #5 Fissile Compounds Shipping
 - 5.1) Subtask #1 Fissile Compounds Shipping5.1)1 Plan/Scope Fissile Compounds Shipping
 - 5.2) Task #5 Quantification Fissile Compounds Shipping
- 1.5.5 JUWPE Fissile Metal
 - 1) Task #1 Planning
 - 2) Task #2 Characterization
 - 3) Task #3 Processing
 - 3.1) Subtask #1 < = 1% U²³⁵ Enriched Metal Processing 3.1)1 Plan/Scope < = 1% U²³⁵ Enriched Metal Processing
 - 3.2) Subtask #2 > 1% U²³⁵ Enriched Metal Processing 3.2)1 Plan/Scope > 1% U²³⁵ Enriched Metal Processing
 - 3.3) Subtask #3 10 Containers of Reject Miscellaneous Enriched Metal Processing
 - 3.3)1 Plan/Scope 10 Containers of Reject Miscellaneous Enriched Metal Processing
 - 3.4) Task #3 Quantification Fissile Metal Processing

- 4) Task #4 Packaging
 - 4.1) Subtask #1 < = 1% U²³⁵ Enriched Metal Packaging
 - 4.1)1 Plan/Scope < = 1% U²³⁵ Enriched Metal Packaging
 - 4.1)2 Quantification < = 1% U²³⁵ Enriched Metal Packaging

PBS-08, NUCLEAR MATERIALS DISPOSITION
CLOSURE PLAN BASIS OF ESTIMATE
70000-PL-0008, Revision 1
September 2001

- 4.2) Subtask #2 >1% U^{235} Enriched Metal Packaging 4.2)1 Plan/Scope >1% U^{235} Enriched Metal Packaging 4.2)2 Quantification >1% U^{235} Enriched Metal Packaging
- 4.3) Subtask #3 Reject Miscellaneous Enriched Metal Packaging
 4.3)1 Plan/Scope Reject Miscellaneous Enriched Metal Packaging
 - 4.3)2 Quantification Reject Miscellaneous Enriched Metal Packaging
- 5) Task #5 Fissile Metal Shipping
 - 5.1) Subtask #1 Fissile Metal Shipping5.1)1 Plan/Scope Fissile Metal Shipping
 - 5.1)2 Quantification Fissile Metal Shipping
- 2.0 Schedule
- 3.0 Manpower Plans
 - 3.1 Fissile Excepted < 1% Compounds
 - 3.2 Fissile Excepted and Depleted Metals
 - 3.3 RCRA Materials
 - 3.4 Fissile Compounds
 - 3.5 Fissile Metal
- 4.0 Estimate
- 5.0 Risk Plan

LIST OF ACRONYMS AND ABBREVIATIONS

ASR Auditable Safety Record
BIO Bases of Interim Operation
DOE Department of Energy

DOE-FN Department of Energy – Fernald DOE-HQ Department of Energy – Headquarters

DOT Department of Transportation

FEMP Fernald Environmental Management Project

FF Fluor Fernald

HEPA High Efficiency Particulate Air IHA Integrated Hazard Analysis IM Information Management

ISO International Shipping Organization

LEL Lower Explosive Limit

LOE Level Of Effort

MA Management Assessment
MTU Metric Tons Uranium
NFS Nuclear Fuel Services, Inc.

NISSMG Nonactinide Isotopes and Sealed Sources Management Group

NMD Nuclear Material Disposition

NMMSS Nuclear Materials Management and Safeguards System

NSS Nuclear and System Safety

NTS Nevada Test Site

PAAA Price-Anderson Amendments Act
PBS Performance Baseline Schedule

PK Process Knowledge
PPG Program, Project, Group
PR Process Requirement

RCRA Resource Conservation and Recovery Act

SA Safety Analysis
SA Safety Assessment
SAR Safety Analysis Report

SARP Safety Analysis Report/Packaging

SBR Safety Basis Requirement

SBWSC Steel-Banded Wooden Shipping Container

SOT System Operability Test

SS System Safety

SSR Standard Start-up Review

SWIFTS Sitewide Waste Information Forecast and Tracking System

TOC Thorium Overpack Container
TQP Training and Qualification Plan
TSR Technical Safety Requirement

UMD Uranium Management Division (Portsmouth, Oh)

USQD/SE Unreviewed Safety Question Determination/Safety Evaluation

UWD Uranium Waste Disposition

WBS DICTIONARY CONTROL ACCOUNT/CHARGE NUMBER

U.S. DEPARTMENT OF ENERGY WORK BREAKDOWN STRUCTURE DICTIONARY PART II - ELEMENT DEFINITION

1. PROJECT TITLE	2. DATE OF CONTRACT	
FEMP (DEFENSE)	12/01/2000	
3. IDENTIFICATION NUMBER		4. INDEX LINE NO.
DE-AC24-010H20115		66
5. WBS ELEMENT CODE	6. WBS ELEMENT TITLE	
1.1.J	PBS 08 NUCLEAR MATERIALS	
7. APPROVED CP NO.		8. DATE OF CHANGES
ORIGINAL SCOPE PER CP# FY01-0	115-0008-00	12/01/2000
9. SYSTEM DESIGN DESCRIPTION	10. BUDGET AND REPORTING NUMBER	•
CERCLA/ACA	EW05H3080	

11. ELEMENT TASK DESCRIPTION

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

The Nuclear Materials Disposition (NMD) Project is responsible for identifying, characterizing, packaging, repackaging, shipping and disposition of nuclear product and uranium waste in the form of metals and compounds.

This element allows for planning, characterization, treatability studies, packaging, preparation, consolidation, and shipment of nuclear materials to off-site locations. The scope is divided into nuclear product and uranium waste materials. The materials are segregated based on condition, state, and enrichment level, and will be processed, packaged, and dispositioned in accordance with appropriate Department Of Transportation (DOT) and off-site burial/storage site requirements.

c. SCOPE OF WORK:

The detailed scope of work of the NMD project is defined in Element Codes 1.1.J.A, 1.1.J.B, and 1.1.J.C. In general, these codes provide for the management, packaging, shipment, and disposition of nuclear product and uranium waste materials. Specifically, 1.1.J.A provides for the management, planning, and support activities pertaining to the characterization, packaging, repackaging and shipment of nuclear product and waste materials. The field activities for nuclear product and uranium waste materials are covered, respectively, under 1.1.J.B and 1.1.J.C.

It should be noted that the term nuclear materials refers to nuclear materials

U.S. DEPARTMENT OF ENERGY WORK BREAKDOWN STRUCTURE DICTIONARY PART II - ELEMENT DEFINITION

1. PROJECT TITLE	2. DATE OF CONTRACT	
FEMP (DEFENSE)	12/01/2000	
3. IDENTIFICATION NUMBER		4. INDEX LINE NO.
DE-AC24-010H20115		66
5. WBS ELEMENT CODE	6. WBS ELEMENT TITLE	
1.1.J	PBS 08 NUCLEAR MATERIALS	
7. APPROVED CP NO.		8. DATE OF CHANGES
ORIGINAL SCOPE PER CP# FY01-0	0115-0008-00	12/01/2000
9. SYSTEM DESIGN DESCRIPTION	10. BUDGET AND REPORTING NUMBER	
CERCLA/ACA	EW05H3080	
11. ELEMENT TASK DESCRIPTION		
product and uranium waste.		
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U.S. DEPARTMENT OF ENERGY WORK BREAKDOWN STRUCTURE DICTIONARY PART II - ELEMENT DEFINITION

1. PROJECT TITLE	2. DATE OF CONTRACT	
FEMP (DEFENSE)	12/01/2000	
3. IDENTIFICATION NUMBER		4. INDEX LINE NO.
DE-AC24-010H20115		67
5. WBS ELEMENT CODE	6. WBS ELEMENT TITLE	
1.1.J.A	MANAGEMENT	
7. APPROVED CP NO.		8. DATE OF CHANGES
ORIGINAL SCOPE PER CP# FY01-0	115-0008-00	12/01/2000
9. SYSTEM DESIGN DESCRIPTION	10. BUDGET AND REPORTING NUMBER	
CERCLA/ACA	EW05H3080	

11. ELEMENT TASK DESCRIPTION

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This control account provides for management and support of characterization, processing, packaging and disposition off site of the FEMP inventory of nuclear product and uranium waste. This control account also provides for treatability processing studies of nuclear product and uranium waste to determine the most cost-effective method of dispositioning the product material and uranium waste. The NMD Project will also support Technology Programs initiatives to identify and implement new and/or innovative technologies for materials treatment, handling, and shipping.

c. SCOPE OF WORK:

Activities include:

- · Project planning and support
- · Characterization
- · Treatability processing studies
- · Technical Programs Initiatives support

WORK SCOPE DEFINITION (Control Account)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 1		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME			
1.1. <i>J</i> .A	MANAGEMENT				
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHO	NE	7. WBS ELEMENT MANAGER		
46	M. FROST/648-	-5685	D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	RIALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-	0115-0008-00		12/2000 - 09/2009		
12. TASK IDENTIFICATION (CONTROL ACCOUNT)	13. TASK DESCRIPTION (ON	IE LINE)			
JNMS	NUCLEAR MATERIAL MANAGEMENT				

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This control account provides for management and support of characterization, processing, packaging and disposition off site of the FEMP inventory of nuclear product and uranium waste. This control account also provides for treatability processing studies of nuclear product and uranium waste to determine the most cost-effective method of dispositioning the product material and uranium waste. The NMD Project will also support Technology Programs initiatives to identify and implement new and/or innovative technologies for materials treatment, handling, and shipping.

c. SCOPE OF WORK:

Activities include:

- · Project planning and support
- · Characterization
- · Treatability processing studies
- · Technical Programs Initiatives support

Project Manager		Control Account Manager	Control Team Manager
Ted	Ila	Ded Pan	Mary E Stone

WORK SCOPE DEFINITION (Control Account)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 2		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME			
1.1.J.A	MANAGEMENT				
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHO	NE	7. WBS ELEMENT MANAGER		
46	M. FROST/648-	-5685	D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	RIALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0	115-0008-00	· -	12/2000 - 09/2009		
12. TASK IDENTIFICATION (CONTROL ACCOUNT)	13. TASK DESCRIPTION (ON	IE LINE)			
JNMS	NUCLEAR MATERIAL MANAGEMENT				

d. WORK SPECIFICALLY EXCLUDED:

- · Packaging, preparation, consolidation, and shipment of nuclear product or uranium waste except to support treatability processing studies. This scope is covered under 1.1.J.B and 1.1.J.C.
- · Routine maintenance of equipment and facilities. (covered in PBS 01)
- · Programmatic MC&A. (covered in WBS Element 1.2.C)
- · Costs associated with Public Affairs (covered in PBS 12)
- · Confirmation measurements of nuclear material and monthly and annual reports required by DOE. (covered in WBS Element 1.2.C Safeguards & Securities)
- · Materials Controls and Accountability administration (covered in WBS Element 1.2.C)
- · Warehousing, surveillance and annual inventory (covered in WBS Element 1.2.C)

WORK SCOPE DEFINITION (Work Package)				
1. PROJECT TITLE		2. DATE		
FEMP (DEFENSE)		09/07/2001	Page 1	
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME		
1.1.J.A	MANAGEMENT			
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER	
46	M. FROST/648-5685		D. PAINE/648-5310	
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE			
EW05H3080	NUCLEAR MATER	RIALS		
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW SCOPE?			11. ESTIMATED START / COMPLETION DATE	
ORIGINAL SCOPE PER CP# FY01-0115-0008-00		12/2000 - 12/2004		
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ONE LINE)			
JNMSA	NUCLEAR MATERIAL MANAGEMENT			

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This work package provides for management and support of characterization, processing, packaging and disposition off-site of the Fernald Environmental Management Project (FEMP) inventory of nuclear product and uranium waste. This charge number provides for treatability processing studies of nuclear product and uranium waste to determine the most cost-effective method of dispositioning these streams. Under this account, the NMD Project will also support Technology Programs initiatives to identify and implement new and/or innovative technologies for waste treatment, handling, and shipping.

The earned value method for this work package is level of effort.

c. SCOPE OF WORK:

Activities include:

- · Preparation of fiscal year work plans, schedules, and cost plans.
- · Procurement of materials and supplies needed to properly package nuclear product and uranium waste material for shipment to an off-site location.
- · Identification and generation of permits for handling, storage, and shipment of nuclear materials.
- · Characterization of uranium waste inventory to support off-site shipment and

Project Manager	Control Account Manager	Control Team Manager
Deld Rai	Teld Vani	Mary E Stone

WORK SCOPE DEFINITION (Work Package)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 2		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NAI	ME			
1.1.J.A	MANAGEMENT				
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER		
46	M. FROST/648-5685		D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
ЕW05H3080	NUCLEAR MATERIALS				
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW SCOPE?			11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0115-0008-00		12/2000 - 12/2004			
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ONE LINE)				
JNMSA	NUCLEAR MATERIAL MANAGEMENT				

disposal.

- · Attendance of required training.
- · Technical assessment of material to package and ship.
- · Administrative program support.
- · Technical program support.
- · Maintenance of the Sitewide Waste Information Forecasting and Tracking System (SWIFTS) database for NMD/UWD.
- \cdot Planning for the removal of normal, depleted, and enriched uranium materials and wastes from site.
- · Packaging, preparation, consolidation, and shipment of nuclear materials and uranium waste to an off-site location to support treatability processing studies only.
- · General project support operations such as procedure and task order development, technical safety board reviews, and DOT determinations.

d. WORK SPECIFICALLY EXCLUDED:

- · Packaging, preparation, consolidation, and shipment of nuclear product or uranium waste except to support treatability processing studies. This scope is covered under 1.1.J.B and 1.1.J.C.
- · Routine maintenance of equipment and facilities. (covered in PBS 01)
- · Costs associated with Public Affairs (covered in PBS 12)
- · Confirmation measurements of nuclear material and monthly and annual reports required by DOE. (covered in WBS Element 1.2.C)
- \cdot Material Controls and Accountability Programmatic. (covered in WBS Element 1.2.C)
- · Annual nuclear material inventory. (covered in WBS Element 1.2.C)
- · Nuclear material surveillance and security. (covered in WBS Element 1.2.C)

SECTION 1 1.0 NARRATIVE

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PROJECT TITLE: NUCLEAR MATERIALS DISPOSITION	2. DATE: 09/10/01 3. PBS#: 08		
4. WBS ELEMENT CODE:	5. WBS ELEMENT TITLE:		
1.1.J.A.	PROJECT MANAGEMENT		
6. CAM NAME/ PHONE:	7. CAM SIGNATURE:		
DON PAINE/ROBERT SCHULTEN			
8. ORIGINAL/ CHANGE SCOPE/ PER CP#:	9.CONTROL ACCOUNT: JNMS		

SECTION 1: JNMS - NUCLEAR MATERIALS DISPOSITION MANAGEMENT

1.0 NARRATIVE

This Control Account defines the scope of work required to perform (execute), manage, provide oversight, plan and administer the Nuclear Materials Disposition Division.

1.1 OVERVIEW

Charge number JNMSA provides for management and support of characterization, processing, packaging and disposition off-site of the Fernald Environmental Management Project (FEMP) inventory of nuclear product and uranium waste. This charge number provides for treatability processing studies of nuclear product and uranium waste to determine the most cost-effective method of dispositioning these streams. Under this account, the NMD Project will also support continued initiatives to identify and implement new and/or innovative technologies for waste treatment, handling, and shipping in order to reduce cost and/or accelerate schedule and/or reduce risk for site completion. This includes supporting Technology Programs efforts and will require attending technology demonstrations, validating technologies for use, and reviewing proposals.

Charge account JNMSB provides for management of site projects safety analysis support.

1.2 ASSUMPTIONS/EXCLUSIONS

1.2.1 Assumptions

- 1) Upon completion of the project scope, six months will be required to complete project closeout activities.
- 2) External reporting requirements are not increased.
- 3) The Waste Generator Services Division Project Execution Plan, workforce, task order system, and procedures will be used.
- 4) The Nuclear Material and Uranium Waste Disposition Projects are completed as scheduled.

- 5) Safety Analysis is a Level of Effort organization using the support organization format.
- 6) Safety Analyses are conducted in this organization.
- 7) No changes in surveillance requirements are expected.

1.2.2 Exclusions

- 1) Packaging and shipping of product materials and uranium waste are excluded except as needed to support treatability studies mentioned above.
- 2) Packaging and shipping of nuclear materials declared waste are excluded.
- 3) Safety Analysis Programmatic is excluded. Covered in PBS12.
- Costs associated with relocating new employees into the Cincinnati area are excluded. Covered in PBS12
- 5) Costs associated with Public Affairs are excluded.
- 6) Material Controls and Accountability administration is excluded. Covered in Non-Defense funding (WBS 1.2.B)
- 7) Warehousing, surveillance, and annual inventory is excluded. Covered in Non-Defense funding (WBS 1.2.C)
- 1.2.3 Government Services and Equipment

None

1.3 DRIVERS

No external events will directly impact the beginning of work. The external drivers listed below are associated with Safety Analysis activities. They do not affect the start date, but may have impacts on the implementation schedule.

- R1-F08-001
- 1) DOE Order 5480.21, Unreviewed Safety Questions
- 2) DOE Order 5480.22, Technical Safety Requirements
- 3) DOE Order 5480.23, Nuclear Safety Analysis Reports
- 4) DOE Order 420.1, Facility Safety, Contractor Requirements Document

R1-F08-001

- 5) 10 CFR 820, Procedural Rules for DOE Nuclear Activities
- 6) 10 CFR 830, Nuclear Safety Management

1.4 PROJECT PHYSICAL DESCRIPTION

The JNMS account provides for the management and support of characterization, processing, packaging and disposition off-site of the FEMP inventory of nuclear product and uranium waste. This account also provides for site project safety analysis support.

1.5 PROJECT PLAN/TECHNICAL SCOPE AND QUANTIFICATION PLAN

Planning and characterization activities are separate from safety assessment activities under the JNMS control account. The following sections describe the activities covered under each charge number.

1.5.1 JNMSA - NMD/UWD Planning and Characterization

The JNMSA charge number provides for planning and characterization of depleted, normal and enriched uranium materials, in various physical states, that are currently stored at the FEMP for off-site disposition. All activities pertaining to the implementation of NMD and UWD planning are covered under the JNMSA charge number, including planning, project controls, acquisitions, administrative and technical support, characterization, and development and revision of documents directing overall work processes. Specific activities are listed below.

1) Task #1 - Planning

1.1)1 Plan/Scope - Planning

Removal of normal, depleted, and enriched nuclear material and uranium waste from site will be planned under this account. Specifically, these activities include evaluation of materials and supplies needed to properly process, package, and ship nuclear product and uranium waste, as well as evaluation of facilities needed to perform processing, packaging, storage, and future use options. There are seven product streams and 24 waste streams to plan for safe, quality, least cost disposition. These streams total approximately 13,700 containers of material on the Plant 1 Pad. The project will investigate any feasible technologies or waste disposition options that are now or may become available to attempt to reduce project cost and/or schedule. In further support of this effort, the project will be working with the Technology Programs group to investigate alternate methods for treating, packaging, and disposal of the material. Expected support for these efforts will require project representatives to travel to off-site locations for demonstrations and meetings on developing technologies. Expected travel is two trips to DOE Ohio offices, one trip to DOE Headquarters, and one trip to a vendor site for two project representatives each year over the next three years.

Additional travel will be required for quality assurance/ quality control visits to vendors and for inspectors to maintain their certifications. Vendor travel will consist of two visits per year to each of the three container type vendors for two inspectors. Two visits per year will also be required to equipment manufacturers for a total of eight trips per year for two people at \$2,000 per person per trip. Three certification trips per year will be required for the QC Lead at \$1,500 per trip.

R1-F08-002 R1-D-692 R1-D-848 The project will support studies and testing by Nuclear Fuel Services, Erwin, Tennessee, to identify and implement process strategies for dispositioning orphan streams of uranium material. This will include characterizing the materials, generating test plans and conducting processing tests using actual materials to convert the streams to final homogeneous forms that meet off-spec nuclear fuel program and/or NTS acceptance criteria, and identifying the most efficient processing scenarios. Also included will be activities required to bring the NFS Industrial Park Facility to a state of readiness to receive Fernald Low Enriched Oxides for storage prior to processing and/or disposition. This effort will complete qualification of the material as a potential blendstock for a future off-spec nuclear fuel program.

The project will continue to explore alternative methods of treatment and disposition in order to reduce cost and accelerate schedule for both product and waste inventories.

1.1)2 Quantification - Planning

R1-F08-002 R1-F08-003 R1-F08-001

Classification	Average FTE	Total
	-	Man-Hours
Tech/Program support rep	1.0	5,712
Proj support mgr	1.0	4,9465
Waste engineer	2	11,154
Project-mgr	1.0	7,425
Waste mgr	1.6	9,019
	Total Man-Hours:	30,831
	ODC (@\$0.298/mh)	\$9,188

^{*}note: ODC rate is from Project Controls data less Laundry

2) Task #2 - Project Controls

2.1)1 Plan/Scope - Project Controls

Project controls activities covered under this account will include preparation of fiscal year work plans, schedules, and cost plans, as well as tracking planned activities and preparing the monthly, quarterly, and annual reports required by DOE. This is a Level of Effort activity that will continue through the duration of field activities plus six months for project closeout. The Engineer/Construction Technician assists in producing reports and will not be required for the duration of field activities. The Scheduler will be required for the

R1-D-528 R1-D-528

duration of field activities. The Cost Analyst will be required to prepare project close-out documentation as well as supporting the direct field activities. The project activities will be reflected in a detailed operations schedule which will indicate all needed activities, both administrative and operational, to execute the project. This schedule will be updated weekly reflecting actual field progress based on field observation and evaluation and review of daily reports. This detailed schedule will be the basis for the project baseline schedule monthly update. As needed, special schedules will be generated to control specific items, such as start-up activities. "What-if" schedules may be generated to compare and contrast different approaches to handling different streams, or to compare different disposition technologies in order to investigate means to reduce schedule and budget. Physical quantities of material characterized, processed, packaged, and shipped will be collected monthly for earned value computation and graphics will be generated to compare actual progress and costs to the baseline. Project costs will be collected and analyzed to assure compliance with the baseline. Monthly variance analyses will be performed, both on schedule and cost. Based on these analyses, project execution may be adjusted to assure the project remains within the baseline and can take advantage of any opportunity to reduce cost and shorten schedule while maintaining safety and quality. Changes will be tracked and change proposals will be prepared if necessary. One possible change proposal will ensue if there is a sale of nuclear material to a private sector customer. Fluor Fernald has committed to DOE-FN and the Office of the Inspector General that for any future sale of material to the private sector, the work effort and the revenues will be tracked separately.

2.1)2 Quantification - Project Controls

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Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Cost Analyst	1.0	14	6,114
Scheduler	1.0	12	5,241
Eng & Const Tech	0.1	9	393
		Total Man-Hours:	11,748
		ODC (@\$0.298/mh)	\$3,500

3) Task #3 - Acquisitions

3.1)1 Plan/Scope - Acquisitions

Activities related to safe storage, packaging, and shipping nuclear materials and uranium waste include both evaluation of facilities and acquisition of materials, and will be performed under the JNMSA charge number. Procurement of packaging materials and equipment necessary for safely shipping the current inventory is also included under the JNMSA charge number. Acquisitions will also support acquiring any of the items or technologies identified by the Technology Programs activities. Container procurement will be the major activity that Acquisitions will support. Shipping containers is a major portion

R1-F08-002 R1-F08-002

of the cost for this project. The following table summarizes the containers and packing materials expected to be procured. The actual costs are estimated in the direct accounts and are detailed in Exhibit 5.

Expected number of containers and materials to be procured:

Container type	Number	Unit price	Total cost
30 gallon drum	8,511	\$34.14	\$290,565
55 gallon drum	10,711	\$53.21	\$569,932
85 gallon drum	404	\$66.65	\$26,926
SBWSC	250	\$515.00	\$128,750
Wooden boxes	1,550	\$200.00	\$310,000
TOC type container	277	\$1270.00	\$351,790
ISO container	136	\$2,000	\$272,000
Pallets	988	\$86.65	\$85,610
Vent/burnout plugs	19,304	\$28.86	\$557,132
Absorbent	2,241	\$120.00	\$268,920
Dunnage	334	\$100.00	\$33,400
		Γotal:	\$2,895,025

These material costs do not include taxes.

3.1)2 Quantification - Acquisitions

Classification	Average	Duration	Total
	FTE	(Quarters)	Man-Hours
Buyer	0.5	17 ,	3,712
		Total Man-Hours:	3,712
		ODC (@\$0.298/mh)	\$1,106

4) Task #4 - Administrative and Technical Support

4.1)1 Plan/Scope - Administrative and Technical Support

Regulatory/compliance activities covered under JNMSA include identifying and obtaining permits for handling, storage, and shipment of nuclear materials and uranium waste. Technical support activities covered under JNMSA include technical assessment of material and waste to package and ship, technical program support, and tracking nuclear material movements. Under this charge number, a representative portion of product and/or uranium waste will be packaged and shipped to a facility for treatability studies. During these studies, treatability processing such as calcination, blending, and extraction will be tried and evaluated to determine disposition options. Administrative program support will be performed under JNMSA.

R1-D-E-724 R1-F08-

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Documentation related to NMD activities will be developed and revised under JNMSA. This includes work instructions, safety plans and reports, and environmental assessment documents.

Task orders and work orders will also be developed under this account. Task orders will be written for each work activity. The task orders will include detailed work instructions that fully define the expected steps of the activity, the required results, and the inventory that is associated with the activity. The project expects to write four task orders for each waste or product stream in order to fully cover all required activities for processing, packaging, and shipping the material. The project expects the task orders will require three revisions to add inventory and to incorporate lessons learned. Work requests will be generated for any maintenance support needed. The project has averaged 25 work orders and 100 work tickets per year and expects this level to be maintained throughout the life of the project.

The Sitewide Waste Information Forecasting and Tracking System (SWIFTS) data for NMD/UWD will also be maintained under this charge number. All containers that are repackaged and shipped require SWIFTS to be updated to reflect the changes. Also required are changes in the inventory, such as product containers being rejected and becoming waste. Each of the approximately 13,700 containers will require attention in SWIFTS.

4.1)2 Quantification - Administrative and Technical Support

Classification	Average FTE	Total
	_	Man-Hours
Clerk	2.0	10,766
Engineer	0.7	2,544
Engineer, process & startup	1.0	4,946
Executive admin	1.0	7,425
Material Prop control rep	1.0	7,425
QC Mgr	1.0	4,946
Rad Eng	0.9	4,717
Tech Writer	1.0	5,241
Tech/Program support rep	4.7	26,850
Waste Engineer	2.0	10,457
	Total Man-Hours:	65,226
	ODC (@\$0.298/mh)	\$19,437

R1-F08-002 R1-F08-001 R1-F08-003 R1-F08-002 R1-F08-003

5) Task #5 - Characterization

5.1)1 Plan/Scope - Characterization

All waste material and reject product material will require characterization prior to shipping to the Nevada Test Site (NTS) or to an approved treatment/disposal facility. The materials in the current inventory that require characterization consist of 1,751 containers of fissile excepted and depleted metal, 438 containers of fissile metal, 4,031 containers of fissile excepted and <1% compounds, 2,289 containers of fissile compounds, 388 containers of RCRA compounds of various enrichments, two T-Hoppers and 624 sealed sources. This includes currently forecasted reject product material.

The first step of characterization is defining the inventory. The UWD Project is establishing the campaigns and submitting them to the Process Knowledge (PK) Team for review. After the PK Team reviews the campaigns, they will submit their recommendations in an assessment letter issued to the UWD Project. The project will review the assessment, adjust the campaigns as necessary, and obtain preliminary approval from the UWD Project Manager. The project finalized the inventory for Sitewide Waste Information Forecast and Tracking System (SWIFTS) Project Program Group (PPG) identification and submitted it to Information Management, who locked the inventory into SWIFTS for inventory tracking. The project will then develop the final campaign packages based on the tagged inventory and submit them to characterization personnel. Characterization personnel will determine if sufficient process knowledge exists on these campaign packages and will complete Radiological Checklists. Characterization personnel will develop an NTS Waste Profile that will be submitted to the project for comment and review. Upon completion, the NTS Waste Profile will be submitted to NTS for approval. Final characterization will be performed during material packaging.

In order to properly characterize the material for disposal, the project will verify existing data on the container inventory and develop a waste campaign strategy. This includes reviewing the adequacy of the current Material Evaluations Forms (MEF) and acquiring supplemental information as needed through archived records searches. The MEF files will be amended as needed and a cross-reference of supplements to the records will be developed. This constitutes a campaign turnover package which will be provided to the Process Knowledge Team for review and comment. There are expected to be 61 campaigns in JUWPA, 23 in JUWPB, 19 in JUWPC, 15 in JUWPD, and 27 in JUWPE for a total of 145 campaign turnover packages to be researched, compiled, and approved.

The project will assist in developing four waste profiles for shipment to the disposal facilities.

The 438 containers of waste fissile metals will be visually inspected, measured, and photographed in their current configuration prior to initiation of packaging to develop data to finalize requirements for handling and shipping, including the total number of shipping containers needed. Other materials will be photographed and inspected as a part of the

repacking operations. This data will provide input needed to complete the Absorbent Determination that is required for the shipping container. This data will also assist Shipping Services in determining DOT compliance and in completing shipping paperwork. The 388 RCRA containers will require sampling and analysis to determine how they will be disposed. The project expects to be able to utilize the sample and analysis data to have the RCRA characteristics removed from all of this material. Preliminary evaluation has indicated that the material is RCRA for items that are not necessarily credible considering the material types.

5.1)2 Quantification - Characterization

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Waste engineer	2.7	12	14,151
		Total Man-Hours:	14,151
		ODC (@\$0.298/mh)	\$4,217

R1-F08-003

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1.5.2 JNMSB - Safety Assessment

1) Task #1 - Safety Assessment

1.1)1 Plan/Scope - Safety Assessment

The JNMSB charge number provides for all safety assessment activities pertaining to the FEMP projects. These activities include management and administration of the FEMP Safety Analysis program. This charge number provides for direction, technical support, review and approval of FF safety analysis and rolated activities designed to maintain compliance with Contract No. DE AC24-010H20115, specifically S/RID Functional Area 9, which contains DOE Orders 5480.21, 5480.22, 5480.23, 420.1, and applicable consensus standards. Technical expertise and services will be provided to the Nuclear Systems Safety (NSS) Functional Area Manager in maintaining NSS requirements, which require that facilities and associated activities at the FEMP be the subject of safety analyses. This account also provides for management and oversight of the implementation of the Fluor Fernald System Safety (SS) program.

Under JNMSB, the Safety Assessment Group will maintain, implement, and administer the FEMP Safety Analysis Program. Related activities include preparing Safety Analysis Reports (SARs), Technical Safety Requirements (TSRs), Safety Basis Requirements (SBRs), Process Requirements (PRs), and Bases of Interim Operations (BIOs). Safety Assessments (SAs) and Auditable Safety Records (ASRs), including reviews, revisions, and upgrades, will also be prepared under this account. In addition, reviews of technical and administrative documents will also be performed under this charge number. Price-Anderson Amendments Act documentation for the Safety Analysis Programs (10 CFR Part 830 Sections 110, 112, and 320) will be prepared as required under JNMSB.

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PBS-08, NUCLEAR MATERIALS DISPOSITION CLOSURE PLAN BASIS OF ESTIMATE 70000-PL-0008, Revision 1 September 2001

Documents routinely generated by the Safety Analysis group yearly include 95 Unreviewed Safety Question screens, 22 Unreviewed Safety Question determinations, 48 Safety Basis Document reviews, 24 Nuclear Safety Operational Authorizations, 10 Criticality Safety Analyses, 13 calculations, and 62 surveillances. The group also maintains 32 procedures, provides review for procedures and task orders, and is an active participant in the Technical Review Board (TRB) and the Independent Safety Review Committee (ISRC).

1.1)2 Quantification - Safety Assessment

Classification	Average	Duration	Total
	FIE	(Quarters)	Man-Hours
Waste engineer	3.7	34	54,843
		Total Man-Hours:	54,943
		ODC (@\$0.298/mh)	\$1 6,373

Nuclear Material Disposition Project Status Chart, Compounds

	Description from NMD	*Containers		Subproject	Charge	* *Total	Active	Containers
Š.	Disposition Summary	Reviewed	Project Name	Name	Number	Containers	Containers	Shipped
က	Normal Compounds	57	57 NORMAL COMPOUNDS		JNMP3	46	3	÷
	15,301.3 U pounds		NORMAL COMPOUNDS (RTS)	***************************************	JNMP6		0	
1	11 Misc. Depleted UF4	63	53 MISC. DEPLETED UF4 (NTS IF WASTED)		JNMP3	54	54	0
12A	12A > 1% U03	2,479	2,479 > 1% U03 (RTS) NEEDS REPACKAGED		JNMP6	2,469	1,632	560
128	12B > 1% U03	240	240 > 1% 003	***************************************	JNMP2	240	240	
			>1% UO3 (RTS)	014001400140014001400140014001400140014	JNMP6	***************************************	277	
16	16 >1% UF4	1,455	1,455 > 1% UF4, CATEGORY I		JNMP2	522	522	0
			>1% UF4, CATEGORY II	***************************************	JNMP2	38	38	
18	18 <= 1% U308	1,360	1,360 < = 1.00% U308 CATEGORY I		JNMP3	1,358	0	822
19	19 Misc. Enr. Comp < = 1%	156	156 MISC, ENR. COMP <=1%, CATEGORY I	4	JNMP3	96	86	0
	(NTS if wasted)		MISC. ENR. COMP. <=1%, CATEGORY II	***************************************	JNMP3	62	62	************
			MISC. ENR. COMP. <=1%, CATEGORY III		JNMP3	e	(C)	
27	27 DEPLETED UF4 (HOLD BACK)	94	94 DEPLETED UF4 (HOLD BACK)		MUWDE	96	0	94
		-	DEP. UF4 IN TOC'S (RTS)		JNMP6		2	(19 TOCs)

* Number of containers originally reviewed by the 99 Replan Task Team.

** Container count may change from original due to Program Project Group moves, repack or unpack activities.

*** Due to repack/unpack or decanting activities, container count may increase/decrease; therefore U-pounds shipped will be noted.

Indicates the project is complete. REVISED 12/14/2000

Nuclear Material Disposition Project Status Chart, Metal

			Exhibit 1, continued					
	Description from NMD	*Containers		Subproject	Charge	* *Total	Active	Containers
No	o. Disposition Summary	Reviewed	Project Name	Namo	Number	Containers	Containers	Shipped
2	2 Drums Normal Metal	378	378 DRUMS/SKIDS NORMAL METAL		JNMP5		3	57
	277,799.7 U pounds						***************************************	* * * 231,236.6
			DRUMS/SKIDS NORMAL METAL (RTS)		JNMP6	†	4	
ဌ		99			JNMP5	56	8	7
	67,832.8 U pounds		DEPLETED INGOTS (SKIDS/DRUMS) (RTS)	***************************************	JNMP6	***************************************	4	* * * 44,866.0
7	7 Misc. Depleted Metal	33	33 MISC. DEPLETED METAL		JNMP6	36	3	4
	33,358.9 U pounds			***************************************			***************************************	***17,855
			MISC, DEPLETED METAL (RTS)	******************************	JNMP6			
-	13 > 1% Ingots	28	28 > 1 % INGOTS		JNMP6	28	3	25
			>1% INGOTS (RTS)	***************************************	JNMP6			
ري	15 Misc. Enriched Metal	969	CATEGORY I		JNMP5	119	119	0
•			CATEGORY II		JNMP5	103	103	
			CATEGORY III		JNMP6	122	122	
**********					JNMP5	35	36	
			BNFL-2ND CONTRACT (ENRICHED METAL)		JNMP5	219	219	
	Charles and Charle						Z	

* Number of containers originally reviewed by the 99 Replan Task Team.

Nuclear Material Disposition Project Status Chart, Rejected	[Planned for disposition under UWD after waste declaration]
Status Ch	after wast
Project	er UWD i
Disposition	osition unde
r Material	d for disp
Nuclea	[Planne

Normal Ingots/Derbies			ADDRESS OF THE PROPERTY OF THE		A STATE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN	
Disposition Summary Normal Ingots/Derbies Normal Compounds Depleted UF4 > 1% U308 <= 1% U308 Misc. Enriched Comp > 1% Drums Normal Metal	ntainers	Subproject	Charge	**Total	Active	Containers
Normal Ingots/Derbies Normal Compounds Depleted UF4 14,488 > 1% U308 664 <= 1% U308	Proje	Name	Number	Containers	Containers	Shipped
Normal Compounds	NORMAL DERBIES FOR ORO (RTS)		JNMP6		-	
Depleted UF4		REJECT WET	JNMP3		21	***4,669.9
Depleted UF4 > 1% U308 <= 1% U308 664 <= 1% U308 Misc. Enriched Comp > 1% Drums Normal Metal		•	JNMP3		3	
Depleted UF4	NORMAL COMPOUNDS	REJECT OTHER	JNMP3	***************************************	9	
> 1% U308 664 <= 1% U308 536 Misc. Enriched Comp > 1% 91	14,488 DEP. UF4 FOR ORO	REJECT SOLID	JNMP1	14,486	8	14,478
> 1% U308 664 <= 1% U308 536 Misc. Enriched Comp > 1% 91						(512 TOCs)
<=1% U308 536 <=1% U308 536 Misc. Enriched Comp > 1% 91	>1% U308, CATEGORY I		JNMP2	217	217	0
<=1% U308 536 <=1% U308 536 Misc. Enriched Comp > 1% 91 Drums Normal Metal	-		JNMP2	402	402	
<=1% U308 536 Misc. Enriched Comp > 1% 91	> 1% U308, CATEGORY III	***************************************	JNMP2	45	45	
Misc. Enriched Comp > 1% 91	636 < = 1.00% U308 CATEGORY I	REJECT WET	JNMP3		97	
Misc. Enriched Comp > 1% 91	< = 1.00% U308 CATEGORY I	REJECT SOLID	JNMP3	A	19	
Misc. Enriched Comp > 1% 91	<= 1.00% U308 CATEGORY I	REJECT OTHER	JNMP3		28	
Misc. Enriched Comp > 1% 91	<= 1,00% U308 CATEGORY II	······································	JNMP3		0	
Misc. Enriched Comp > 1% 91	<= 1.00% U308 CATEGORY II	REJECT WET	JNMP3	***************************************	27	
Misc. Enriched Comp > 1% 91	.00% U308 CATEGO	REJECT SOLID	JNMP3		Ω.	
Misc. Enriched Comp > 1% 91	.00% U308 CATEGC	REJECT OTHER	JNMP3		ဇ	
Misc. Enriched Comp > 1% 91	.00% U308 CATEGC		JNMP3		0	
Misc. Enriched Comp > 1% 91	.00% U308 CATEGO	REJECT WET	JNMP3		30	
Misc. Enriched Comp > 1% 91	.00% U308 CATEGORY	REJECT SOLID	JNMP3		15	
Misc. Enriched Comp >1% 91	.00% U308 CATEGORY	REJECT OTHER	JNMP3		7	
Misc. Enriched Comp > 1% 91	.00% U308 CATEGORY		JNMP3		9	
Misc. Enriched Comp > 1% 91	< = 1.00% U308 CATEGORY III EXCL 822/154	REJECT WET	JNMP3		09	
Misc. Enriched Comp > 1% 91	<= 1,00% U308 CATEGORY III EXCL 822/154	REJECT SOLID	JNMP3		22	
Misc. Enriched Comp > 1% 91	<= 1.00% U308 CATEGORY III EXCL 822/154	REJECT OTHER	JNMP3		20	
Misc. Enriched Comp > 1% 91	< = 1,00% U308 CATEGORY IV	REJECT OTHER	JNMP3		201	
Misc. Enriched Comp > 1% 91 Drums Normal Metal	<= 1.00% U308 CATEGORY IV	REJECT WET	JNMP3			
Misc. Enriched Comp > 1% 91 Drums Normal Metal	<=1,00% U308 (RTS)		JNMP6		0	
Drums Normal Metal	91 MISC. ENRICHED COMP > 1%, CATEGORY I		JNMP2	115	115	0
Drums Normal Metal			JNMP2	63	63	
Drums Normal Metal	MISC. ENRICHED COMP > 1%, CATEGORY IIA		JNMP2	2	2	
	DRUMS/SKIDS NORMAL METAL	REJECT	JNMP5		34	
7 Misc. Depleted Metal	MISC. DEPLETED METAL	REJECT	JNMP5		20	

Nuclear Material Disposition Project Status Chart, Completed

	Containers	Shipped	11,688 1,688 (279 HIWMB	1,477 1,477 (217 TOGs) 64 (42 Sealands) 710 (355 SBWSO) 1 1 1 1 (TOC)
	Active	Containers		
	* *Total	Containers	116	1,477 64 710 12
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Exhibit 1, continued		The second second project Name and second se	1117 NORMAU METAL IN WOOD BOXES NORMAL DERBIES FOR ORO NORMAL INGOITS FOR ORO 1,637 DEPLETED INGOITS (HH) 4 DEPLETED DERBIES Depleted (PAS)	1477 DEP. CORES FOR ORO (RTS) 64 DEP. UP4 FOR ORO (T-HOPPERS) 710 > 1% DERBIES > 1% DERBIES ARGON NATIL LAB (RTS) NFS (RTS) SANTA HE UP4 DRUMS DEP. HAUF-HIGH (NEEDS REPACKAGED)
	*Containers	Reviewed	1,637	114777 1 64 1 710
		o. Disposition Summary	1 Normal Ingots/Derbles 4 Depleted Ingots (HH) 6 Depleted Derbles	B Depleted cores 10 Depleted T-hoppers 14 > 1% Derbies
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Nuclear Materials Disposition Project - Uranium Product Disposition

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Nuclear Materials Disposition Project - Material Requirements

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Nuclear Materials Disposition Project - Material Requirements

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SECTION 1

2.0 SCHEDULE

FY01 FY02 FY03 FY04 FY05 FY07 FY08 FY09 FY10 FY11				INITIATE PBS08 NEW BASELINE EFFORT	MINIOR MATERIAL MANAGEMENT - FY01	■ MATERIAL MANAGEMENT HAMMOCK	REJECTED NM PROD. DECLARED WASTE	MINISTER MATERIAL MANAGEMENT - FY02	♦COMPLETE DISP. OF NM PROD. ACCEPT BY PORTSMOUTH	MENNING NOTIFIED MANAGEMENT - FY03	MANAGEMENT - FY04	♦ADDITIONAL MILESTONES, TREAT UWD/T-HOPPER WASTE	COMPLETE DISPOSITION OF URANIUM WASTE	♦PBS08 COMPLETE		Sheet 1 of 1 Early Bar Date Learly Bar Date Control of the Control	GEMENT R1-F08-003	
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SECTION 1 3.0 MANPOWER PLANS

MPS # 1JA01 NUCLEAR MATERIAL MANAGEMENT

DRIVERS	START DATE	END DATE	101	9	FY 2001 Q1 Q2 Q3	9	6 اٿ	FY 2002 Q1 Q2 Q3	3 04	ļσ	FY 2003 Q1 Q2 Q3	03 Q4		FY 2004 Q1 Q2 Q3	8 8	8	를 함	FY 2005 Q1 Q2 Q3	8	- 9	FY 2006 Q1 Q2 Q3	6 23 Q4	1 -
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Sheet Totals:

MPS # 1JA01 NUCLEAR MATERIAL MANAGEMENT

801 Nuclear Materials Summary 802 Setup of Fac. & Repkg of Uranium Metals 803 Setup of Fac. & Repkg of < 1% Uranium 804 Facilities Setup for Repkg > 1 WT% U235 805 Shipment of Nuclear Materials 806 Nuc. Material Risk/PPE/SCA/Planning/Whs 807 Small Scale Processing of Nuclear Material																		
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808 UWD Depleted LLW & Depleted Ingots	ts 10/02/2000	04/17/2002																
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003																
810 UWD Planning	10/02/2000	09/30/2003																
811 PPE & SCA Support for UWD Activities	es 07/23/2001	10/16/2003																
812 UWD RCRA Materials	02/04/2002	01/20/2004																
813 Feas. Study Processing Uranium Waste	ste 10/01/2002	06/18/2003																
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005																
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Administration	Clerks		0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	-
Project Controls Cc	Cost Analyst		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Engineering & Design	Engineer & Construction Tech	ı Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_
Engineering & Design	Engineer		0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Operations Labor En	Engineer: Process & Startup	ırtup	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	
Administration	Executive Administrator		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Information Management Inf	Information Records Rep.	á	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Procurement Ma	Material Property Control Rep.	il Rep.	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	
Project Controls Sc	Scheduler		0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Project Management Pro	Project Mgr.		0	0	ö	0	0	0	0	0	0	0	0	0	0	0	0	
QA/QC QA	QA/QC Tech.		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health Ra	Rad Engineer		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Administration	Technical Writer		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Project Management Te	Tech/Program Support Rep.	Rep.	0	0	. , ,	0	0	ó	0	0	0	0	0	0	0	0	0	
Waste Management Wa	Waste Engineer		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Waste Management Wa	Waste Engineering Mgr.		0	0	0	0	0	ò	0	0	0	0	0	0	0	0	0 0	

Sheet Totals:

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MPS # 1JA02 PROJECT SAFETY ANALYSIS SUPPORT

			FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
DRIVERS	START DATE END	DATE	TOT Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
801 Nuclear Materials Summary	10/02/2000	05/20/2002	XX XXX XXX XXX XXX XXX	XX XXX XX				
802 Setup of Fac. & Repkg of Uranium Metals	10/02/2000	07/18/2001	X XXX XXX XXX					
803 Setup of Fac. & Repkg of < 1% Uranium	10/02/2000	08/30/2001	XX XXX XXX XXX					
804 Facilities Setup for Repkg > 1 WT% U235	10/02/2000	12/27/2001	XXX XXX XXX XXX	XXX				
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002	X XXX XXX XXX XXX	XXXX	700 440 1			
806 Nuc. Material Risk/PPE/SCA/Planning/Whse	10/02/2000	05/20/2002	XX XXX XXX XXX XXX XXX	XX XXX XX				
807 Small Scale Processing of Nuclear Material	10/02/2000	01/30/2001	x xxx					
808 UWD Depleted LLW & Depleted Ingots	10/02/2000	04/17/2002	X XXX XXX XXX XXX XXX	X XXX XXX X				
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003	XX XXX XXX XXX	X XXX XXX XXX XXX XXX XXX XXX XXX	×××			
810 UWD Planning	10/02/2000	09/30/2003	XX XXX XXX XXX	XXX XXX XXX XXX XXX XXX XXX XXX XXX XX	XXX XXX XXX XXX			
811 PPE & SCA Support for UWD Activities	07/23/2001	10/16/2003	XX	X XXX XXX XXX XXX XXX XXX XXX XXX	XXX XXX XXX XXX	*		
812 UWD RCRA Materials	02/04/2002	01/20/2004		XX XXX XX	X XXX XXX XXX XXX XXX XXX XXX XX	××××		
813 Feas. Study Processing Uranium Waste	10/01/2002	06/18/2003			XXX XXX XXX			
814 UWZ Design∕Const∕Treat/Ship	10/02/2003	09/29/2005				*** *** *** *** *** *** ***	XXX XXX XXX XXX	
Safety Analysis Project Management Tech/Pro	Tech/Program Support Rep.		0 0 0 00.0	0	0	0 0	0 0 0	0 0

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Sheet Totals:

MPS # 1JA02 PROJECT SAFETY ANALYSIS SUPPORT

			FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
DRIVERS	START DATE	END DATE	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4			
801 Nuclear Materials Summary	10/02/2000	05/20/2002					
802 Setup of Fac. & Repkg of Uranium Metals	10/02/2000	07/18/2001					
803 Setup of Fac. & Repkg of < 1% Uranium	10/02/2000	08/30/2001					
804 Facilities Setup for Repkg > 1 WT% U235	10/02/2000	12/27/2001					
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002					
806 Nuc. Material Risk/PPE/SCA/Planning/Whs 10/02/2000	10/02/2000	05/20/2002					
807 Small Scale Processing of Nuclear Material	10/02/2000	01/30/2001					
808 UWD Depleted LLW & Depleted Ingots	10/02/2000	04/17/2002					
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003					
810 UWD Planning	10/02/2000	09/30/2003					
811 PPE & SCA Support for UWD Activities	07/23/2001	10/16/2003					
812 UWD RCRA Materials	02/04/2002	01/20/2004					
813 Feas. Study Processing Uranium Waste	10/01/2002	06/18/2003				· · · · · · · · · · · · · · · · · · ·	
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005				a and	
Project Management Tech/Pr	Tech/Program Support Rep.	Rep.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0 0

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Sheet Totals:

SECTION 1 4.0 ESTIMATE

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JNMSA NUCLEAR MATERIAL MANAGEMENT

PBS: 08			Ē	uor Fe	Fluor Fernald,	, Inc.				DATE	06-Sep-01
			1	ESTIMATE SU	ESTIMATE SUPPORT WORKSHEET					PROJECT	PROJECT MGR: Donald Paine
ACCT:	ā			FOR ACTIVITY	FOR ACTIVITY BASED ESTIMATING	ATING				CAM: PREPARE	CAM: Donald Paine PREPARED BY: Mary Stone
1	R1-F08-002, R1-F08-003			(1 FTE EQL	(1 FTE EQUALS 1747 HOURS)	3S)				FISCALY	FISCAL YEAR: 2001-2004
Resource: CLERKS Res Dept: 946	KS CLERKS Overtime:	Cia	EOC: Class: SAL	LABOR	NO.						
	Oct 00- Sep 01	Oct 01- Sen 02	Oct 02- Sep 03	Oct 03- Seo 04	Oct 04- Sep 05	Oct 05- Sep 06	Oct 06- Sep 07	Oct 07- Sep 08	Oct 08- Sep 09	Oct 09- Sep 10	
Yr Hours:	2,904.0	3,494.0	3,494.0	874.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cum Hours: Yr Total Cost: Cum Total Cost:	2,904,0 69,377 69,377	6,398.0 87,861 157,237	9,892.0 93,062 250,299	10,766.0 24,651 274,950	10,766.0 0 274,950	10,766.0 0 274,950	10,766.0 0 274,950	10,766.U 0 274,950	10,766.0 0 274,950	10,766.0 0 274,950	
Resource: CSTANL Res Dept: 946	NL COST ANALYST Overtime:	Ö	EOC: Class: SAL	LABOR	OR R						
	Oct 00- Sep 01	Oct 01- Sep 02	Oct 02- Sep 03	Oct 03- Sep 04	Oct 04- Sep 05	Oct 05- Sep 06	Oct 06- Sep 07	Oct 07- Sep 08	Oct 08- Sep 09	Oct 09- Sep 10	
Yr Hours:	1,452.0	1,747.0	1,747.0	874.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cum Hours: Yr Total Cost:	1,452.U 56,483 56,403	71,532	75,766	9,820.0 40,140	0,820.0 0 0,020.00	3,920.0 0 243.920	0,020,0	3,820.0 0 0 0,820.0	3,620.0 0 243,620	0,020.0	
cum lotal cost:	56,483	128,014	203,781	243,920	243,920	243,920	243,920	743,920	243,920	078'870	
Resource: E&CTEC Res Dept: 946	EC ENG & CONST TECH Overtime:		EOC: Class: SAL	LABOR	30R						
	Oct 00- Sep 01	Oct 01- Sep 02	Oct 02- Sep 03	Oct 03- Sep 04	Oct 04- Sep 05	Oct 05- Sep 06	Oct 06- Sep 07	Oct 07- Sep 08	Oct 08- Sep 09	Oct 09- Sep 10	
Yr Hours: Cum Hours:	145.0 145.0	174.7 319.7	44.0 363.7	0.0 363.7	0.0 363.7	0.0 363.7	0.0 363.7	0.0 363.7	0.0 363.7	0.0 363.7	
Yr Total Cost: Cum Total Cost:	3,877 3,877	4,917 8,794	1,312 10,106	0 10,106	0 10,106	0 10,106	0 10,106	0 10,106	0 10,106	0 10,106	
Resource: ENGINR Res Dept: 946	AR ENGINEER Overtime:	วี	EOC: Class: SAL	LABOR	30R						
	Oct 00- Sep 01	Oct 01- Sep 02	Oct 02- Sep 03	Oct 03- Sep 04	Oct 04- Sep 05	Oct 05- Sep 06	Oct 06- Sep 07	Oct 07- Sep 08	Oct 08- Sep 09	Oct 09- Sep 10	
Yr Hours: Cum Hours:	1,452.0	873.5 2.325.5	218.0 2.543.5	0.0 2.543.5	0.0 2.543.5	0.0 2.543.5	0.0 2.543.5	0.0 2,543.5	0.0 2.543.5	0.0 2.543.5	
Yr Total Cost:	99,840	63,220	16,712	0	0	0	0	0	0	0	
Cum Total Cost:	99,840	163,059	179,771	179,771	179,771	179,771	179,771	179,771	179,771	179,771	
Resource: ENGPRC Res Dept: 946	RC ENG PROCESS/STARTUP Overtime:		EOC: Class: SAL	LABOR	30R						

Page 2 of 4

Yr Hours. Cum Hours.	Oct 00- Sep 01 1,452.0 1,452.0	Oct 01- Sep 02 1,747.0 3,199.0	Oct 02- Sep 03 1,747.0 4,946.0	Oct 03- Sep 04 0.0 4,946.0	Oct 04- Sep 05 0.0 4,946.0	Oct 05- Sep 06 0.0 4,946.0	Oct 06- Sep 07 0.0 4.946.0	Oct 07- Sep 08 0.0 4,946.0	Oct 08- Sep 09 0.0 4,946.0	Oct 09- Sep 10 0.0 4,946.0
	81,283	102,939 184,222	109,033 293,255	0 293,255	0 293,255	0 293,255	0 293,255	293,255	0 293,255	0 293,255
MAT300 946	MATERIAL OBJCLASS300 Overtime:	S300 Class:	EOC:	MATE	MATERIAL					
Yr Units: Cum Units: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 12,000.0 12,000 12,000 12,000	Oct 01- Sep 02 18,355.0 30,355.0 18,851 30,851	Oct 02- Sep 03 18,355.0 48,710.0 19,360 50,210	Oct 03- Sep 04 18,355.0 67,065.0 19,902 70,112	Oct 04- Sep 05 0.0 67,065.0 0	Oct 05- Sep 06 0.0 67,065.0 0	Oct 06- Sep 07 0.0 67,065,0 0	Oct 07- Sep 08 0.0 67,065.0 0	Oct 08- Sep 09 0.0 67.065.0 0	Oct 09- Sep 10 0.0 67,065.0
ODC600 946	ODC 600 Overtime: FY01	Class:	EOC:	opc						
Yr Units: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 40,000.0 40,000 40,000	Oct 01- Sep 02 49,000.0 89,000.0 50,323 90,323	Oct 02- Sep 03 49,000.0 138,000.0 51,682 142,005	Oct 03- Sep 04 24,500.0 162,500.0 26,564 168,569	Oct 04- Sep 05 0.0 162,500.0 168,569	Oct 05- Sep 06 0.0 162,500.0 168,569	Oct 06- Sep 07 0.0 162,500.0 0 168,569	Oct 07- Sep 08 0.0 162,500.0 0	Oct 08- Sep 09 0.0 162,500.0 168,569	Oct 09- Sep 10 0.0 162,500.0 168,569
ODC700 946	ODC 700 Overtime: FY01	Class:	EOC:	opc						
Yr Units: Cum Units: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 40,000.0 40,000 40,000 40,000	Oct 01- Sep 02 49,000.0 89,000.0 50,323 90,323	Oct 02- Sep 03 49,000.0 138,000.0 51,682 142,005	Oct 03- Sep 04 24,500.0 162,500.0 26,564 168,569	Oct 04- Sep 05 0.0 162,500.0 168,569	Oct 05- Sep 06 0.0 162,500.0 0 168,569	Oct 06- Sep 07 0.0 162,500.0 0 168,569	Oct 07- Sep 08 0.0 162,500.0 168,569	Oct 08- Sep 09 0.0 162,500.0 168,569	Oct 09- Sep 10 0.0 162,500.0 168,569
OPRMGR 946	OPERATIONS MGR Overtime: FY01	Class:	EOC:	LABOR	R					
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 1,452.0 1,452.0 75,911	Oct 01- Sep 02 1,747.0 3,199.0 96,135 172,046	Oct 02- Sep 03 1,747.0 4,946.0 101,827 273,873	Oct 03- Sep 04 0.0 4,946.0 0 273,873	Oct 04- Sep 05 0.0 4,946.0 0 273,873	Oct 05- Sep 06 0.0 4,946.0 0 273,873	Oct 06- Sep 07 0.0 4,946.0 273,873	Oct 07- Sep 08 0.0 4,946.0 273,873	Oct 08- Sep 09 0.0 4,946.0 273,873	Oct 09- Sep 10 0.0 4,946.0 0 273,873
PARSONS 946	PARSONS Overtime: FY01	Class:	EOC:	SUBC	SUBCONTRACTORS					
Units: S:\EST_FORM\$\understandb.xts	Oct 00- Sep 01 135,000.0	Oct 01- Sep 02 162,000.0	Oct 02- Sep 03 0.0	Oct 03- Sep 04 0.0 EXCLUDES G	Oct 03- Oct 04- Oct 05- Sep 04 Sep 05 Sep 06 0.0 0.0 0.0 EXCLUDES G/A AND ESCALATION COSTS	Oct 05- Sep 06 0.0 TION COSTS	Oct 06- Sep 07 0.0	Oct 07- Sep 08 . 0.0	Oct 08- Sep 09 0.0	Oct 09- Sep 10 0.0

Page 3 of 4

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297,000.0 0 301,374				· · · · ·				2,6		8 (
297,000.0 0 301,374		Oct 08- Sep 09 0.0 4,946.0 0		Oct 08- Sep 09 0.0 4,946.0 0		Oct 08- Sep 09 0.0 4,714.0 0 235,121		Oct 08- Sep 09 0.0 20,892.4 0 2,065,404		Oct 08- Sep 09 0.0 32.562.0 0
297,000.0 0 301,374		Oct 07- Sep 08 0.0 4,946.0 0 277,016		Oct 07- Sep 08 0.0 4,946.0 0		Oct 07- Sep 08 0.0 4,714.0 0 235,121		Oct 07- Sep 08 0.0 20,892.4 0 2,065,404		Oct 07- Sep 08 0.0 32,562.0 0
297,000.0 0 301,374		Oct 06- Sep 07 0.0 4,946.0 0 277,016		Oct 06- Sep 07 0.0 4,946.0 161,767		Oct 06- Sep 07 0.0 4,714.0 0 235,121		Oct 06- Sep 07 0.0 20,892.4 0 2,065,404		Oct 06- Sep 07 0.0 32,562.0 0
297,000.0 0 301,374		Oct 05- Sep 06 0.0 4,946.0 0 277,016		Oct 05- Sep 06 0.0 4,946.0 161,767		Oct 05- Sep 06 0.0 4,714.0 0 235,121		Oct 05- Sep 06 0.0 20,892.4 0 2,065,404		Oct 05- Sep 06 0.0 32,562.0 0
297,000.0 0 301,374	LABOR	Oct 04- Sep 05 0.0 4.946.0 0 277,016	LABOR	Oct 04- Sep 05 0.0 4,946.0 161,767	LABOR	Oct 04- Sep 05 0.0 4,714.0 0	LABOR	Oct 04- Sep 05 0.0 20,892.4 0 2,065,404	LABOR	Oct 04- Sep 05 0.0 32,562.0 0
297,000.0 0 301,374		Oct 03- Sep 04 0.0 4,946.0 0 277,016		Oct 03- Sep 04 0.0 4,946.0 0		Oct 03- Sep 04 0.0 4,714.0 0 235,121		Oct 03- Sep 04 0.0 20,892.4 0		Oct 03- Sep 04 1,747.0 32,562.0 107,170
297,000.0 0 301,374	EOC:	Oct 02- Sep 03 1,747.0 4,946.0 102,995 277,016	EOC:	Oct 02- Sep 03 1,747.0 4,946.0 60,146	EOC:	Oct 02- Sep 03 1,048.0 4,714.0 55,149 235,121	E0C:	Oct 02- Sep 03 0.0 20,892.4 0 2,065,404	EOC:	Oct 02- Sep 03 8,717.0 30,815.0 504,974 1,681,824
297,000.0 166,374 301,374	Class:	Oct 01- Sep 02 1,747.0 3,199.0 97,239 174,021	Class:	Oct 01- Sep 02 1,747.0 3,199.0 56,784 101,622	Class:	Oct 01- Sep 02 2.795.0 3,666.0 138,861 179,972	E OF Class:	Oct 01- Sep 02 9,081.7 20,892.4 923,900 2,065,404	P Class:	Oct 01- Sep 02 10,482.0 22,098.0 573,282 1,176,850
135,000,0 135,000 135,000	SCHEDULERS Overtime: FY01	Oct 00- Sep 01 1,452.0 1,452.0 76,782	QA/QC TECH Overtime: FY01	Oct 00- Sep 01 1,452.0 1,452.0 44,838	RAD ENGINEER Overtime: FY01	Oct 00- Sep 01 871.0 871.0 41.111	TEAM PARTNER HOM Overtime: FY02	Oct 00- Sep 01 11,810.7 11,810.7 1,141,504	TECH/PROG SUPT RE Overtime: FY01	Oct 00- Sep 01 11,616.0 11,616.0 603,567
	PJCSCH 946		QACTEC 946		RADENG 946		TPH0 946		TPSREP 946	
Cum Units: Yr Total Cost: Cum Total Cost:	Resource: P Res Dept: 9	Yr Hours: Cum Hours: Yr Total Cost; Cum Total Cost	Resource: Q Res Dept: 9	Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	Resource: R Res Dept: 9	Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	Resource: T Res Dept: 9	Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	Resource: Ti Res Dept: 94	Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:

Resource:	WSTENG	WASTE ENGINEER	EER	;		EOC:	LABOR					
Res Dept:	946	Overtime:	FY04	Class:		SAL						
		Oct 00		Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
		Sep 01		Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
Yr Hours:		13,068.0		0,482.0	9,158.0	2,149.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum Hours:		13,068.0		3,550.0	32,708.0	34,857.0	34,857.0	34,857.0	34,857.0	34,857.0	34,857.0	34,857.0
Yr Total Cost:	••	098'999		563,021	521,026	129,472	0	0	0	0	0	0
Cum Total Cost:	st:	999	-	,229,881	1,750,907	1,880,379	1,880,379	1,880,379	1,880,379	1,880,379	1,880,379	1,880,379
Resource:	WSTMGR	WASTE ENGINEER	VEER MGR		_		LABOR					
Res Dept:	946	Overtime:	FY01	Class:		SAL						
		Oct 90-	4	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
		Sep 0	_	Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
Yr Hours:		2,904.0	0	3,494.0	1,747.0	874.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum Hours:		2,904	0	6,398.0	8,145.0	9,019.0	9,019.0	9,019.0	9,019.0	9,019.0	9,019.0	9,019.0
Yr Total Cost:		159,77	8	202,348	107,163	56,773	0	0	0	0	0	0
Cum Total Cost:	st:	159,77	80	362,126	469,289	526,063	526,063	526,063	526,063	526,063	526,063	526,063
GRAND TOTALS	ALS:											
		Oct 00-		Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
		Sep 01		Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
Yr Hours:		52,030.7		9,611.9	33,161.0	6,518.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum Hours:		52,030.7		11,642.6	134,803.6	141,321.6	141,321.6	141,321.6	141,321.6	141,321.6	141,321.6	141,321.6
Yr Total Cost:		3,348,210	••	267,909	1,871,888	431,237	0	0	0	0	0	0
Cum Total Cost:	st:	3,348,210	Ī	5,616,119	8,488,007	8,919,244	8,919,244	8,919,244	8,919,244	8,919,244	8,919,244	8,919,244

REVIEW TEAM THE CONTROL TEAM (

SECTION 1 5.0 RISK PLAN

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Risk/Opportunity Identification and Analysis Form

Project: Nuclear Material Disposition		PBS Number: 8			Total Baseline Dollars (Minimum Case):	ollars (Minimum	Case):	\$8,919,244	244	
Evaluator: J. Samples Date: May 1, 2001	Date: May 1, 2001	WBS Number: 1.1.J.A.				L				
CAM: R. Schulten	Date: May 1, 2001	Control Account Numbe	t Number: JNMS							
Project Task	Risk and/or Opportunity Potential Impact	Potential Impact	Internal	Impact	Risk Impact	Risk	Risk	Probable	Risk	Risk
			0 r	Cost \$	Level	Probability	Probability	Cost \$	Critical	Handling
			External	(Maximum		%	Level	(Likeliest	Value	Strategy
			Driver	Case)				Case)		
Reviews and assessments	Reviews and assessments Increased project scrutiny Increased level on	Increased level on	Internal	\$250,000	_	2	20	2 \$50,000	000	2 Accept
		internal and external								
		assessments (DNFSB,								
		ISRC, ORR, DOE,								
		regulators, etc)								

Total:

WBS DICTIONARY CONTROL ACCOUNT/CHARGE NUMBER

U.S. DEPARTMENT OF ENERGY WORK BREAKDOWN STRUCTURE DICTIONARY PART II - ELEMENT DEFINITION

1. PROJECT TITLE	2. DATE OF CONTRACT	
FEMP (DEFENSE)	12/01/2000	
3. IDENTIFICATION NUMBER		4. INDEX LINE NO.
DE-AC24-010H20115		68
5. WBS ELEMENT CODE	6. WBS ELEMENT TITLE	
1.1.J.B	NUCLEAR MATERIALS DISPOSITION	
7. APPROVED CP NO.		8. DATE OF CHANGES
ORIGINAL SCOPE PER CP# FY01-0	115-0008-00	12/01/2000
9. SYSTEM DESIGN DESCRIPTION	10. BUDGET AND REPORTING NUMBER	
CERCLA/ACA	EW05H3080	

11. ELEMENT TASK DESCRIPTION

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This element will provide for the nuclear product field planning, product identification, field characterization, processing, packaging, and shipment of uranium compounds and metal to the Uranium Management Division (UMD) in Portsmouth, Ohio. The compound streams include miscellaneous depleted UF4, enriched >1% U235 UF4, enriched >1% U235 UO3 to be repackaged through the vacuum transfer system into <350 gram U235 packages, enriched >1% U235 UO3 already in 350 gram U235 packages, and miscellaneous <1% U235 enriched compounds. The metal streams include normal metal, depleted metal, and miscellaneous enriched metal.

The earned value method for this work package is percent complete.

c. SCOPE OF WORK:

Activities include:

- Planning for direct work (task order walk downs and daily safety briefings)
- · Field characterization (visual inspections and) photographs
- Process (hydrogen monitoring, decant, vent) containers.
- · Repackage compounds and metals streams for shipment to the Uranium Management Division in Portsmouth, Ohio.
- · Ship repackaged product.

WORK SCOPE DEFINITION (Control Account)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 1		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NAI	ME			
1.1. <i>J</i> .B	NUCLEAR MATER	IALS DISPOSITIO	и		
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHO	NE	7. WBS ELEMENT MANAGER		
46	R. SCHULTEN/6	48-5730	D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	IALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW S	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0	115-0008-00		12/2000 - 05/2002		
12. TASK IDENTIFICATION (CONTROL ACCOUNT)	13. TASK DESCRIPTION (ON	E LINE)			
JNMP	NUCLEAR MATER	IAL DISPOSITION			

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This element will provide for the nuclear product field planning, product identification, field characterization, processing, packaging, and shipment of uranium compounds and metal to the Uranium Management Division (UMD) in Portsmouth, Ohio. The compound streams include miscellaneous depleted UF4, enriched >1% U235 UF4, enriched >1% U235 UO3 to be repackaged through the vacuum transfer system into <350 gram U235 packages, enriched >1% U235 UO3 already in 350 gram U235 packages, and miscellaneous <1% U235 enriched compounds. The metal streams include normal metal, depleted metal, and miscellaneous enriched metal.

The earned value method for this work package is percent complete.

c. SCOPE OF WORK:

Activities include:

- · Planning for direct work (task order walkdowns and daily safety briefings)
- · Field characterization (visual inspections) and photographs
- · Process (hydrogen monitoring, decant, vent) containers.
- · Repackage compounds and metals streams for shipment to the Uranium Management Division in Portsmouth, Ohio.

Project Manager	Control Account Manager	Control Team Manager	
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WORK SCOPE DEFINITION (Control Account)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 2		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME			
1.1. <i>J</i> .B	NUCLEAR MATERIALS DISPOSITION				
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHO	NE	7. WBS ELEMENT MANAGER		
46	R. SCHULTEN/648-5730		D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATERIALS				
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0	115-0008-00		12/2000 - 05/2002		
12. TASK IDENTIFICATION (CONTROL ACCOUNT)	13. TASK DESCRIPTION (ONE LINE)				
JNMP	NUCLEAR MATER	IAL DISPOSITION			

· Ship repackaged product.

d. WORK SPECIFICALLY EXCLUDED:

- · Operations Assurance manpower to perform Standard Startup Reviews (covered in PBS 12)
- · Warehousing of nuclear materials. (covered in WBS Element 1.2.C)
- · Planning, characterization, processing, packaging and shipment of uranium waste. (covered in JNMSA, JUWP)
- · Routine maintenance of equipment and facilities. (covered in PBS01)
- · Manpower to deliver Personal Protective Equipment (PPE) and manage the Satellite Clothing Area (SCA) support. (covered in PBS01)
- · Sampling and Analysis for customer specifications.
- · Shipping to an international location
- · UMD Oak Ridge and Portsmouth, Ohio cost. (DOE cost)
- · Shipment and storage of materials to an off-site commercial storage facility.
- · Disposition of nuclear materials generated by other remediation activities.

WORK SCOPE DEFINITION (Work Package)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 1		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME			
1.1.J.B	NUCLEAR MATERIALS DISPOSITION				
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHO	NE	7. WBS ELEMENT MANAGER		
46	R. SCHULTEN/648-5730		D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE	-			
EW05H3080	NUCLEAR MATER	RIALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW S	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0115-0008-00			12/2000 - 05/2002		
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ON	E LINE)			
JNMPC	NUCLEAR MATERIAL PRODUCT COMPOUNDS				

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This work package provides for the repackaging and preparation of compounds for shipment to the UMD in Portsmouth, Ohio.

The product compounds consists of the following as of December 1, 2000:

- · 54 containers of miscellaneous depleted UF4
- \cdot 1,646 containers of >1% U235 U03 in <350 U235 gram packages
- · 1,455 containers of enriched UF4
- · 166 containers of <=1% U235 enriched miscellaneous compounds
- · 240 containers of >1% U235 U03 requiring repackaging

The earned value for this work package is percent complete.

c. SCOPE OF WORK:

Activities include:

- · Planning for direct work (task order walk downs and daily safety briefings)
- · Field characterization (visual inspections) and photographs
- · Assuring work can be and is performed in a safe manner.
- · Identifying the specific containers associated with each product stream.

Project Manager	Control Account Manager	Control Team Manager
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WORK SCOPE DEFINITION (Work Package)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 2		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME			
1.1.J.B	NUCLEAR MATER	RIALS DISPOSITION	N		
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHO	NE	7. WBS ELEMENT MANAGER		
46	R. SCHULTEN/648-5730		D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	IALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0	115-0008-00	12/2000 - 05/2002			
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ON	E LINE)			
JNMPC	NUCLEAR MATERIAL PRODUCT COMPOUNDS				

- · Implementing task orders for pulling the material from inventory.
- · Locating and removing the material from inventory.
- · Venting and decanting material as necessary.
- · Transporting the material to the packaging area.
- \cdot Inspecting, packaging and repackaging of all compounds classified as nuclear product for shipment to the UMD.
- · Transport of repackaged material to a shipment preparation area.
- \cdot Labeling of material for shipment and preparing paperwork for shipment to Portsmouth, Ohio.
- · Activities associated with the installation of the vacuum transfer station.
- · Independent assessment and readiness review associated with the vacuum transfer repackaging process.
- · Segregation of rejected material for declaration as uranium waste.
- · Preparing facilities to perform packaging and storage operations.
- · Final preparation and shipment of materials to the UMD. Includes FY01 Metal Shipments resulting from the one for one criteria for crosswalking charge numbers.
- · Costs for personal protective equipment, materials and supplies, packaging materials, and packaging equipment.

d. WORK SPECIFICALLY EXCLUDED:

- \cdot Operations Assurance manpower to perform Standard Startup Reviews (covered in PBS 12)
- · Warehousing of nuclear materials. (covered in WBS Element 1.2.C)
- Planning, characterization, processing, packaging and shipment of uranium waste. (covered in JNMS, JUWP)
- · Routine maintenance of equipment and facilities. (covered in PBS01)
- · Manpower to deliver Personal Protective Equipment (PPE) and manage the Satellite Clothing Area (SCA) support. (covered in PBS01)
- · Sampling and Analysis for customer specifications.
- · Shipping to an international location
- · UMD Oak Ridge and Portsmouth, Ohio cost. (DOE cost)
- · Shipment and storage of materials to an off-site commercial storage facility.
- Disposition of nuclear materials generated by other remediation activities.

WORK SCOPE DEFINITION (Work Package)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 1		
3. WBS ELEMENT CODE 4. WBS ELEMENT TITLE/NAME					
1.1. <i>J</i> .B	NUCLEAR MATER	RIALS DISPOSITIO	И		
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER		
46	R. SCHULTEN/648-5730		D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	RIALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0115-0008-00			12/2000 - 05/2002		
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ON	E LINE)			
JNMPM NUCLEAR MATERIAL PRODUCT METALS					

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This work package provides for the processing, repackaging and preparation of metals for shipment to the UMD in Portsmouth, Ohio.

The product metals consists of the following as of December 1, 2000:

- · 595 containers of miscellaneous enriched metal
- · 26 containers of normal and depleted metal

The earned value method for this work package is percent complete.

c. SCOPE OF WORK:

Activities include:

- Planning for direct work (task order walk downs and daily safety briefings)
- · Field characterization (visual inspections) and photographs
- · Assuring work can be and is performed in a safe manner.
- · Identifying the specific containers associated with each product stream.
- Implementing task orders for pulling the material from inventory.
- · Locating and removing the material from inventory.
- · Venting and decanting material as necessary.
- · Transporting the material to the packaging area.

Project Manager	Control Account Manager	Control Team Manager
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WORK SCOPE DEFINITION (Work Package)						
1. PROJECT TITLE		2. DATE				
FEMP (DEFENSE)		09/07/2001 P				
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME				
1.1.J.B	NUCLEAR MATERIALS DISPOSITION					
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHO	NE	7. WBS ELEMENT MANAGER			
46	R. SCHULTEN/6	48-5730	D. PAINE/648-5310			
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE					
EW05H3080	NUCLEAR MATER	IALS				
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW S	SCOPE?		11. ESTIMATED START / COMPLETION DATE			
ORIGINAL SCOPE PER CP# FY01-0	115-0008-00	12/2000 - 05/2002				
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ONE LINE)					
JNMPM NUCLEAR MATERIAL PRODUCT METALS						

- · Inspecting, packaging and repackaging of all metals classified as nuclear product for shipment to the UMD in Portsmouth, Ohio.
- · Transport of repackaged material to a shipment preparation area.
- Labeling of material for shipment and preparing paperwork for shipment to Portsmouth.
- · Segregation of rejected material for declaration as uranium waste.
- · Preparing facilities to perform packaging and storage operations.
- · Costs for personal protective equipment, materials and supplies, packaging materials, and packaging equipment.

d. WORK SPECIFICALLY EXCLUDED:

- \cdot FY01 shipping will be charged to compounds resulting from the one for one criteria for crosswalking charge numbers (JNMPC).
- · Operations Assurance manpower to perform Standard Startup Reviews (covered in PBS 12)
- · Warehousing of nuclear materials. (covered in WBS Element1.2.C)
- · Planning, characterization, processing, packaging and shipment of uranium waste. (covered in JNMS, JUWP)
- · Routine maintenance of equipment and facilities. (covered in PBS01)
- · Manpower to deliver Personal Protective Equipment (PPE) and manage the Satellite Clothing Area (SCA) support. (covered in PBS01)
- · Sampling and Analysis for customer specifications.
- \cdot Shipping to an international location
- · UMD Oak Ridge and Portsmouth, Ohio cost. (DOE cost)
- · Shipment and storage of materials to an off-site commercial storage facility.
- · Disposition of nuclear materials generated by other remediation activities.

SECTION 2 1.0 NARRATIVE

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2. PROJECT TITLE:	2. DATE: 09/10/01	3. PBS#: 08	
NUCLEAR MATERIALS DISPOSITION			
4. WBS ELEMENT CODE:	5. WBS ELEMENT TITLE		
1.1.J.B.	NUCLEAR MATERIALS DISPOSITION		
6. CAM NAME/ PHONE:	7. CAM SIGNATURE:		
DON PAINE/ROBERT SCHULTEN			
8. ORIGINAL/ CHANGE SCOPE/ PER CP#:	9.CONTROL ACCOUNT:	: JNMP	

SECTION 2: JNMP - NUCLEAR MATERIALS DISPOSITION

1.0 NARRATIVE

1.1 OVERVIEW

This control account will control remaining nuclear product planning, characterization, packaging/repackaging, and shipping to the Uranium Management Division (UMD) in Portsmouth, Ohio. There are two types of product, compounds and metal, controlled by two charge numbers.

The charge number for compounds is JNMPC. The compound streams are; miscellaneous depleted UF₄, enriched > 1% U²³⁵ UF₄, enriched > 1% U²³⁵ UO₃ to be repackaged through the vacuum transfer system into < 350 gram packages, enriched > 1% U²³⁵ UO₃ already in 350 gram packages, and miscellaneous < = 1% enriched compounds.

The charge number for metals is JNMPM. The metal streams are; normal metal, depleted metal, and miscellaneous enriched metal. The materials will be prepared in accordance with site requirements, off-site location specifications, and applicable transportation guidelines.

1.2 ASSUMPTIONS/EXCLUSIONS

1.2.1 Assumptions

- R1-D-540
- 1) Project execution will be in Buildings 80, 56A, 71, 77, and 30A. Relocating to other sites will entail increased cost for setup. A minimum of a six month schedule delay would be realized and cost would depend on the final location.
- 2) Current Department of Transportation regulations and requirements for shipping packages and shipment processes do not materially change.
- 3) Over the road transportation routes currently in use remain in use.
- 4) Repackaging and shipping of metals that do not fall within the Certificates of Compliance approved payloads will not be more costly than packaging in Steel Banded Wooden Shipping Containers (SBWSC).

- 5) Quality containers (drums, metal boxes, SBWSCs) will be available as needed.
- 6) Material will be inspected for acceptance by and transported to Portsmouth according to the UMD Shipping and Receiving Plan.
- 7) Inventory quantities based upon December 1, 2000 material inventory.
- Any material found beyond current inventory, including remediation activities, will be budgeted for by the identifying organization.

R1-D-539 9) All material is assumed to be destined for Portsmouth. Any sale to the private sector will be the subject of a change order to assure all labor and material supporting the transaction, as well as any revenue, is captured separately.

R1-D-530 10) DOT will grant shipping exceptions for material that does not fall within the Certificate of Compliance. This is expected to be a small amount of enriched metal. Based on discussions with Shipping Services, pursuing exceptions would be preferable; both cost and schedule-wise, to pursuing certification of new containers.

R1-D-540

- 11) Product material is transferred to UMD/Portsmouth. Transportation to another facility is not included
- 12) Fluor Fernald bears no financial responsibility for material at Portsmouth that may be declared waste

1.2.2 Exclusions

- 1) Operations Assurance manpower to perform Standard Startup Reviews (SSRs) is excluded. Covered by Operations Assurance.
- 2) Manpower to deliver Personal Protective Equipment (PPE) and manage the Satellite Change Areas is excluded. Covered by Infrastructure Services.
- 3) Building maintenance is excluded. Covered by Infrastructure Services.

R1-D-539

- 4) The sale of material to the private sector is excluded. A change order will be processed upon completion of a sales agreement.
- 1.2.3 Government-Furnished Equipment/Services

R1-D-530 1) DOT will grant shipping exceptions for material that does not fall within the Gertificate of Compliance.

2) DOE provides approved Certificates of Compliance for packaging and shipment of the various metal payloads by January 31, 2001.

R1-D-540

- 3) Product material is transferred to UMD/Portsmouth. Transportation to another facility is not included.
- 4) UMD remains open and accepts the material per the UMD Shipping and Receiving Plan.
- 5) Fluor Fernald bears no financial responsibility for material at Portsmouth that may be declared waste.
- 6) The FEMP bears no financial responsibility for material at Portsmouth beyond September 2002.
- 7) The inventory of product material that has been or is expected to be rejected by UMD will not change significantly from Exhibit 1, Page 3.
- 8) DOE Fernald receives authority to make waste declarations based upon the Screening Plan.
- 9) DOE HQ approves DOE Fernald authority to make waste declaration of rejected product that does not meet the UMD criteria by October 1, 2001. This population includes materials that have been or are currently wet, that have impurities, or contain scrap material.
- 10) DOE Fernald declares rejected materials waste by October 15, 2001. This will prevent impacting the June 1, 2002 commitment to remove nuclear material from the FEMP.

1.3 DRIVERS

1) DOE letter number DOE-0782-99 commitment to remove nuclear material from site by June 1, 2002.

1.4 PROJECT PHYSICAL DESCRIPTION

The materials managed under control account JNMP consist of 3,507 containers of compounds of various enrichments and 621 containers of metal, also of various enrichments. (See attached spreadsheet, Exhibit 1.) This material will require repackaging into DOT approved shipping containers for transport to the UMD/ Portsmouth for storage for eventual beneficial reuse.

Preparation for this repackaging will include locating and removing the material from inventory, venting and decanting (metal), and moving the materials to Building 80, 56A,

3 of 17

PBS-08, NUCLEAR MATERIALS DISPOSITION
CLOSURE PLAN BASIS OF ESTIMATE
70000-PL-0008, Revision 0
September 2001

or 71. Decant water will be collected and transported to the Advanced Waste Water Treatment Plant for treatment. The repackaged materials will then be moved to Building 30A where they will be labeled and combined into distinct shipments for transport to Portsmouth.

Inspection, packaging, and repackaging will take place in Building 80, 56A, or 71. Repackaged material will be transferred to Building 30A for shipment preparation. Building 77 will be used for storage of new drums and interim storage of completed packages prior to labeling for shipment (overflow storage). These buildings will be required for Nuclear Material repackaging until June 1, 2002.

1.5 PROJECT PLAN/TECHNICAL SCOPE AND QUANTIFICATION PLAN

The product streams to be addressed under control account JNMP are grouped under two charge numbers, JNMPC for compounds, and JNMPM for metals. There are five distinct compound streams, and three metal streams. Specific activities associated with managing and shipping compounds and metals are described in detail in the following sections.

1.5.1 JNMPC - Compounds

1) Task #1 - Planning

Planning for compounds disposition (3,507 containers) includes: assuring all work can be and is performed in the safest manner; identifying the specific containers associated with each product stream; preparing task orders for pulling the material from inventory, transporting it to the packaging area, packaging, and preparing the material for shipment; performing management assessments of work processes and equipment; preparing and performing or monitoring construction acceptance tests, start-up tests, and system operability tests.

2) Task #2 - Packaging

Packaging of compounds will be based in either Building 80 or Building 56A. Material will be pulled from inventory by Plant 1 Pad/Storage personnel per approved task order inventory request and transported to either Building 80 or Building 56A where NMD personnel will repackage it into shippable quantities and/or containers. The five compound streams for repackaging are: miscellaneous depleted UF₄, 54 containers; > 1 % U²³⁵ UO₃ in <350 gram packages, 1,646 containers; enriched UF₄, 1,455 containers; miscellaneous enriched $< = 1\% U^{235}$ compounds, 166 containers; and $> 1\% U^{235} UO_3$ in > 350 gram packages, 240 containers. The 240 containers of >1% U²³⁵ UO₃ will require repackaging to reduce quantities to a DOT approved shipping amount that equals 350 grams or less U²³⁵. This amounts to approximately 70 pounds of material given a 1.25% U²³⁵ enrichment. Containers in storage contain more than 70 pounds. To repackage this material safely and efficiently into shippable quantities, NMD has commissioned the design and construction of a vacuum transfer station. The first of three units arrived at the site on December 18, 2000 and is being installed in Building 56A. This is a self-contained unit that needs only electricity and compressed air supplied in order to perform its designed function. Building 56A was prepared for these units by having increased electrical capacity installed. An air compressor has been leased for the duration of the project and an air header, air dryers, and associated hardware installed in Building 56A. A management assessment and a Standard Start-up Review are expected prior to operation. These activities, including construction, will be conducted under charge number JNMPC.

2.1) Subtask #1 - Miscellaneous Depleted UF4 Packaging

2.1)1 Plan/Scope - Miscellaneous Depleted UF4 Packaging

There are 54 containers of miscellaneous depleted UF4. The containers will be pulled from inventory on Plant 1 Pad, per approved task order inventory request, and transported to Building 80 by Plant 1 Pad/Storage personnel. At Building 80, NMD personnel will take the containers into a HEPA booth, open them and inspect the contents to determine if the material is dry, free-flowing, and free of foreign objects in accordance with the UMD Shipping and Receiving Plan. Material that passes inspection will be over-packed into TOC type boxes. The overpacking will result in four shippable containers. The boxes will be transferred to Building 30A, where they will be labeled for shipment and designated for transport to Portsmouth. Any containers that do not pass the initial inspection as dry, free-flowing, and free of foreign material will be closed and returned to Plant 1 Pad to await waste declaration. The project expects 50 percent of this material to be rejected. Reject quantities are captured on Exhibit 3. NMD plans to complete packaging and shipment of this stream by September 30, 2001.

2.1)2 Quantification - Miscellaneous Depleted UF4 Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	10.0	1	4,368
MVO	2.0	1	874
MC&A	0.5	1	218
QC	0.5	1	218
Rad Tech	1.0	1	437
Supervisor	1.0	1	437
		Total Man-Hours:	6,552
		ODC (@\$0.298/mh)	\$1,952

^{*}note: ODC rate is from Project Controls data less Laundry

2.2) Subtask #2 - > 1% U²³⁵ UO₃ (in 350 gram packages) Packaging

2.2)1 Plan/Scope - > 1% U²³⁵ UO₃ (in 350 gram packages) Packaging

The 1,646 containers (remaining of 2,479) of UO₃ in 350 gram packages will be repacked into new 55-gallon drums for shipment. This stream originated from the "C-13" Project, in which material was vacuum transferred into shippable packages. Subsequently, the packaged material was determined to be unsuitable for shipping, and now requires repackaging. The containers will be pulled from inventory on Plant 1 Pad, per approved task order inventory request, and transported to Building 80 by Plant 1 Pad/Storage personnel. At Building 80, NMD personnel will remove the 30-gallon drums from the current 55's and place them in new 55-gallon drums. Vermiculite will be placed in the interstitial space. The drums will be closed per the drum manufacturer's closure instructions concerning gap and torque. This effort will result in 1,646 shippable containers. The repackaged drums will be transferred to Building 30A where they will be labeled and banded onto pallets for shipment to Portsmouth. This stream is in progress and NMD plans to complete packaging and shipment by April 15, 2001. The project does not expect any of this material to be rejected.

2.2)2 Quantification - > 1 % U²³⁵ UO₃ (in 350 gram packages) Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	7.0	2	6,115
MVO	1.5	2	1,310
MC&A	0.5	2	437
QC	0.5	2	437
Rad Tech	1.5	2	1,310
Supervisor	1.0	2	874
		Total Man-Hours:	10,483
		ODC (@\$0.298/mh)	\$3,124

2.3) Subtask #3 - Enriched UF4 Packaging

2.3)1 Plan/Scope - Enriched UF4 Packaging

There are 1,455 containers of enriched UF₄. This inventory is divided into four parts: <350 gram U²³⁵ cans (10 gallon) in half-high boxes; <350 gram U²³⁵ cans loose; 350 to 800-gram U²³⁵ cans in half-high boxes; and loose 350 to 800 gram U²³⁵ cans. Each specific inventory will be pulled from inventory on Plant 1 Pad, per approved task order inventory request, and transported to Building 80 by Plant 1 Pad/Storage personnel. At Building 80, NMD personnel will inspect and repackage the material.

The <350 gram U²³⁵ cans in half-highs will be placed in the HEPA booth, the box opened and the cans of UF₄ removed. The cans will then be opened and inspected to determine that the material is dry, free-flowing and free of foreign objects in accordance with the UMD Shipping and Receiving Plan. Cans that pass inspection will be closed and packaged into 30-gallon drums. Vermiculite will be placed in the interstitial space. Burn-out plugs will be installed on the 30-gallon drums and they will be placed into 55-gallon drums. Vermiculite will be placed in the interstitial space. The drums will be closed per the drum manufacturer's closure instructions concerning gap and torque. The repackaged drums will be transferred to Building 30A.

The <350 gram U²³⁵ loose cans will be placed in the HEPA booth, the cans will be opened and inspected to determine that the material is dry, free-flowing, and free of foreign objects in accordance with the UMD Shipping and Receiving Plan. Cans that pass inspection will be closed and packaged into 30-gallon drums. Vermiculite will be placed in the interstitial space. Burn-out plugs will be installed on the 30-gallon drums and they will be placed into 55-gallon drums. Vermiculite will be placed in the interstitial space. The drums will be closed per the drum manufacturers closure instructions concerning gap and torque. The repackaged drums will be transferred to Building 30A.

The 350 to 800-gram U^{235} cans in half-highs will be placed in the HEPA booth, the box opened and the cans of UF₄ removed. The cans will then be opened and inspected to

determine that the material is dry, free-flowing, and free of foreign objects in accordance with the UMD Shipping and Receiving Plan. Cans that pass inspection will be closed and packaged into 55-gallon drums. Vermiculite will be placed in the interstitial space. The drums will be closed per the drum manufacturer's closure instructions concerning gap and torque. The repackaged drums will be transferred to Building 30A.

The 350 to 800-gram U²³⁵ loose cans will be placed in the HEPA booth, the cans will be opened and inspected to determine that the material is dry, free-flowing, and free of foreign objects in accordance with the UMD Shipping and Receiving Plan. Cans that pass inspection will be closed and packaged into 55-gallon drums. Vermiculite will be placed in the interstitial space. The drums will be closed per the drum manufacturer's closure instructions concerning gap and torque. The repackaged drums will be transferred to Building 30A.

Containers that do not pass the initial inspection for dry and free-flowing material will be closed and returned to Plant 1 Pad to await waste declaration. Reject material that does not require processing will be packaged for shipment. The project expects ten percent of this material to be rejected. Reject quantities are captured on Exhibit 3.

This project will result in 1,455 shippable containers (less the reject amount). At Building 30A, the repackaged drums will be labeled for shipment to Portsmouth. NMD plans to complete packaging and shipment of the UF₄ stream by September 30, 2001.

2.3)2 Quantification - Enriched UF₄ Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	10.0	2	8,735
MVO	2.0	2	1,747
MC&A	0.5	2	437
QC	0.5	2	437
Rad Tech	1.0	2	874
Supervisor	1.0	2	874
		Total Man-Hours:	13,104
		ODC (@\$0.298/mh)	\$3,905

2.4) Subtask #4 - Miscellaneous Enriched < = 1 % U²³⁵ Compounds Packaging

2.4)1 Plan/Scope - Miscellaneous Enriched < = 1% U²³⁵ Compounds Packaging

There are 166 containers of miscellaneous enriched < = 1% U²³⁵ compounds. These containers will be pulled from inventory on Plant 1 Pad, per approved task order inventory request, and transported to Building 80 by Plant 1 Pad/Storage personnel. At Building 80, NMD personnel will take the containers into a HEPA booth, open the containers and inspect the contents to determine if the material is dry, free-flowing, and free of foreign

objects in accordance with the UMD Shipping and Receiving Plan. Material that passes inspection will be overpacked into TOC type metal boxes and transferred to Building 30A. Shipping labels will be placed on the boxes, which will be grouped into shipments to Portsmouth. This project will result in 33 shippable containers. Containers that do not pass the initial inspection for dry, free flowing material will be packaged for shipment as waste and returned to Plant 1 Pad to await waste declaration. The project expects 25 percent of the material will be rejected. Reject quantities are captured on Exhibit 3. NMD plans to complete shipment of this stream by September 30, 2001.

2.4)2 Quantification - Miscellaneous Enriched < = 1% U²³⁵ Compounds Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	7.0	1:0	3.057
MVO	1.0	110	437
MC&A	0.5	1.0	218
QC	0.5	11.0	218
Rad Tech	1.5	1.0	655
Supervisor	1:0	1.0	437
		Total Man-Hours:	5,022
		ODC (@\$0.298/mh)	\$1,496

2.5) Subtask #5 - > 1% U²³⁵ UO₃ (to be repackaged) Packaging

2.5)1 Plan/Scope - > 1% U²³⁵ UO₃ (to be repackaged) Packaging

There are 240 containers of >1% U²³⁵ UO₃ that are not packaged for shipment. Repackaging is required to reduce quantities to a DOT approved shipping amount that equals 350 grams or less U²³⁵. This amounts to approximately 70 pounds of material given a 1.25% enrichment. Containers in storage contain more than 70 pounds. To repackage these containers safely and efficiently into shippable quantities, NMD has commissioned the design and construction of a vacuum transfer station. The first of three units arrives at the site on December 18, 2000 and is being installed in Building 56A. This is a self-contained unit that needs only electricity and compressed air supplied in order to perform its designed function. Building 56A was prepared for these units by having increased electrical capacity installed. An air compressor has been leased for the duration of the project and an air header, air dryers, and associated hardware installed in Building 56A. The project will perform start-up testing, a formal Systems Operability Test, and extensive hands-on training and familiarization with the equipment using surrogate material prior to beginning operations. A management assessment and Standard Start-Up Review will be performed prior to operation. This is projected to take sixteen to twenty weeks to fully ready the process for operation and receive formal clearance to begin.

These containers will be pulled from inventory on Plant 1 Pad, per approved task order inventory request, and transported to Building 56A by Plant 1 Pad/Storage personnel.

R1-F08-002

Transport and handling personnel must be Fissile Material Handlers (FMHs) and only one safe mass grouping at a time will be transported to and received at Building 56A. At Building 56A, NMD personnel will open each drum in a HEPA enclosure and inspect the material to ensure it is dry, free-flowing, and free of foreign objects in accordance with the UMD Shipping and Receiving Plan. The lid will be replaced on the drum, and it will be moved to the vacuum transfer facility and placed in the booth. An empty 30-gallon drum will be placed into the outlet booth and operators will transfer material equal to < 350 gram U^{235} amount into the destination drum. When the appropriate amount has been transferred, the drum will be wiped down and removed and another empty drum will be placed in the unit. This will continue until all the material in the source drum is transferred into packages with 350 grams or less U²³⁵. NMD expects 16 repackaged drums for each source drum of this material. The 30-gallon drum will be packaged into a 55-gallon drum. Vermiculite will be placed in the interstitial space. The drums will be closed per the drum manufacturer's closure instructions concerning gap and torque. The empty source drum will be removed for crushing. 240 empty drums will require crushing. The new drums will be transferred to Building 30A. At Building 30A the drums will be labeled for shipment and grouped for transport to Portsmouth. The project will result in 3,680 shippable containers. Containers that do not pass the initial inspection will be closed and returned to Plant 1 Pad to await waste declaration. The project expects a 10% reject rate. Reject quantities are captured on Exhibit 3. NMD plans to complete packaging and shipment of this stream by May 30, 2002.

2.5)2 Quantification - > 1% U²³⁵ UO₃ (to be repackaged) Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	14.0	4	24,458
MVO	3.0	4	5,241
MC&A	1.0	4	1,747
QC	1.0	4	1,747
Rad Tech	2,0	4	3,494
Supervisor	1.0	4	1,747
		Total Man-Hours:	387434
		ODC (@\$0.298/mh)	\$111,453

R1-F08-002

All or major portions of three product streams have been rejected by the UMD based upon preliminary data and process knowledge. These include 530 containers of < = 1% U²³⁵ U₃O₈, 664 containers of > 1% U²³⁵ U₃O₈, and 180 containers of > 1% U²³⁵ miscellaneous compounds. After receiving the formal waste declaration from DOE, these streams will be handled as waste in the Uranium Waste Disposition Project. Rejected materials are being planned under the uranium waste project and are detailed on Exhibit 3. Investigations continue into alternate disposal methods for this material.

The following Plant 1 Pad/Storage crew supports the delivery of containers to the above subtasks.

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	2.0	4	3,494
MVO	2.0	4	3,494
MC&A	0.5	4	874
IH	0.5	4	874
Rad Tech	1.0	4	1,747
Supervisor	0.5	4	874
		Total Man-Hours:	11,357
		ODC (@\$0.298/mh)	\$3,384

2.6) Subtask #6 - Shipping Compounds

2.6)1 Plan/Scope - Shipping Compounds

Shipping will be based in Building 30A. Repackaged material will be transferred there from the various repackaging areas in Building 80 and Building 56A. In Building 30A, inventory and shipping labels will be placed on the packages. Shipments will be assembled for Portsmouth and the proper documentation will be completed. Drums will be banded to pallets and the pallets loaded onto trailers and secured by Transportation laborers. Box shipments will be loaded onto trailers and secured by Transportation laborers. Shipping and Packaging Services will be responsible for acquiring transport and overseeing DOT compliance items.

Shipment Quantities - Compounds

Product Stream	Shippable Containers	Shipments
Miscellaneous Depleted UF ₄	4	1
> 1% U ²³⁵ UO ₃ (in 350 gram packages)	1,646	123
Enriched UF ₄	1,455	180
Miscellaneous Enriched < = 1% U ²³⁵	33	7
Compounds		
>1% U ²³⁵ UO ₃ (to be repackaged)	3,680	88

R1-F08-002

2.6)2 Quantification - Shipping Compounds

Classification	Average	Duration	Total
	FTE	(Quarters)	Man-Hours
Hazwat	2.0	6	5,241
MVO	2.0	6	5,241
Trans Laborer	1.0	6	2,621
Prof Whse Attend	0.5	6	1,310
MC&A	0.3	6	786
QC	1.0	6	2,621
Rad Tech	1.0	6	2,621
Supervisor	1.0	6	2,621
		Total Man-Hours:	23,062
		ODC (@\$0.298/mh)	\$6,872

R1-F08-002

1.5.2 JNMPM - Metal

1) Task #1 - Planning

Planning for metals disposition (621 containers) includes: assuring all work can be and is performed in the safest manner; identifying the specific containers associated with each product stream; preparing task orders for pulling the material from inventory, transporting it to the packaging area, packaging, and preparing the material for shipment; performing management assessments of work processes and equipment; preparing and performing or monitoring construction acceptance tests, start-up tests, and system operability tests.

2) Task #2 - Processing

2.1) Subtask #1 - Processing Metal

2.1)1 Plan/Scope - Processing Metal

Processing required for the metal streams includes venting and decanting. Due to concerns over potential generation of hydrogen gas and pyrophoricity of uranium metal, guidelines and procedures have been implemented to assure that all containers of uranium metal are monitored for less than 10% Lower Explosive Limit (LEL) of hydrogen, then are vented and, if water is present, decanted. This is performed by Plant 1 Pad/Storage personnel prior to the material being moved to Buildings 80, 56A, or 71 for packaging.

2.1)2 Quantification - Processing Metal

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	1.5	1	655
MVO	0.5	1	218
1H	0.5	1	218
Rad Tech	0.5	1	218
Supervisor	0.5	1	218
		Total Man-Hours:	1,527
		ODC (@\$0.298/mh)	\$455

3) Task #3 - Packaging

Packaging metal will consist of removing metal from storage drums and placing it into shippable quantities and containers. This work will be performed in Building 80 and 71. There are twelve containers of normal metal, six of miscellaneous depleted metal, and eight of depleted ingots remaining. Due to the small amount, these will be handled together. There are 595 containers of miscellaneous enriched metal of various sizes, shapes, and enrichments. The project is baselined to ship all the material to Portsmouth.

3.1) Subtask #1 - Normal and Depleted Metal Packaging

3.1)1 Plan/Scope - Normal and Depleted Metal Packaging

There are twelve containers of normal metal, six of miscellaneous depleted metal, and eight of depleted ingots remaining. Due to the small amount, these will all be handled together. All of these drums require decanting, as the presence of water is the reason they were not packaged and shipped with like material previously completed. Plant 1 Pad/Storage personnel will collect and decant the containers, per approved task order inventory request, and transfer them to Building 80. NMD personnel will remove the metal pieces from the drums and package them into wooden boxes. The boxes will then be banded together and placed into TOC type boxes, which will be transferred to Building 30A for labeling and preparation for shipping. This effort will result in seven shipping containers for transport to Portsmouth. NMD plans to complete packaging and shipment of this stream by September 30, 2001.

3.1)2 Quantification - Normal and Depleted Metal Packaging

R1- F08- 002	

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	9.0	1	3,981
MVO	4:0	1	1,747
MC&A	1.0	1	437
QC	1.0	1	437
Rad Tech	2.0	1	878
Supervisor	1:0	1	437
		Total Man-Hours:	7,862
		ODC (@\$0.298/mh)	\$2,343

3.2) Subtask #2 - Miscellaneous Enriched Metal Packaging

3.2)1 Plan/Scope - Miscellaneous Enriched Metal Packaging

There are 595 containers of miscellaneous enriched metal. This stream presents the greatest challenge facing the project, because this material is of many different sizes, shapes, and enrichments. Size and shape are major determinants of the type of shipping container in which the metal can be shipped. The great variety in size and shape is due to the sudden shutdown of the Fernald plant, which left unfinished materials in various stages of processing. Certified payloads never existed for some of these types of material, since it was never to be shipped in these forms. A group of wooden boxes, approved as Type A Fissile packages under Certificate of Compliance USA/5467/AF-85(DOE) and supported by Safety Analysis Report for Packaging HNF-SD-TP-SARP-019, are a critical component in the packaging of enriched metal. These boxes were developed early in the history of the FEMP, and their use contributed greatly to the site's outstanding record of transportation safety and compliance. However, the certification of these containers was allowed to lapse in December 1988. Diligent research confirmed that there were no other feasible packaging for this material, and recertification began in November 1994. The recertification of these packages, by DOE-HQ in Washington, D.C., is due by January 31, 2001. Delay in receiving the recertification by the January 31, 2001 deadline will impact the project's ability to complete disposition of this material by the commitment date of June 1, 2002.

Wooden boxes will be used for the metal that fits the approved payloads, unless alternate packaging is more cost effective. Other metal will be packaged in appropriately sized cans/drums and over-packed inside 55-gallon drums limited to one piece per drum. Where the enrichment is > 1% U²³⁵, the metal will be shipped in a fissile package. The project is continuing to search for packaging to ship a small amount of material that is not approved for current packages. The project expects to receive DOT shipping exceptions in order to transport this small amount of material.

Prior to initiation of repackaging operations, all the containers of miscellaneous enriched metal will be opened and visually inspected by Plant 1 Pad/Storage personnel. The metal will be measured to assist in making a determination of what type of container it may be packaged in for shipping. This data will also assist in determining how many of each container to procure.

Plant 1 Pad/Storage personnel will pull the miscellaneous enriched metal from inventory, per approved task order inventory request. The containers of metal will be inspected for potential flammable or explosive gases (less than 10% of the Lower Explosive Limit for hydrogen), vented, and decanted as needed per existing Plant 1 Pad/Storage procedures. The project predicts 25% of the containers will need decanting. After completion of these steps, Plant 1 Pad/Storage personnel will transport the containers to Building 71. In Building 71, NMD personnel will remove the pieces of metal from the containers and inspect them to assure they conform to UMD acceptance criteria. Material that passes inspection will be repackaged into the approved wooden boxes (SARP boxes), fissile exception packages, or a DOT approved (exception) package. This decision will be based upon the physical size, shape, and weight of the metal and will be defined in the task order. Material that does not pass the inspection will be returned to Plant 1 Pad for storage and eventual disposal as waste by the UWD Project. A waste declaration will be requested. The project expects to generate 3,255 shipping containers for transport to Portsmouth. The containers will be transferred to Building 30A for labeling and preparation for shipment.

3.2)2 Quantification - Miscellaneous Enriched Metal Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	7.0	6	18,344
MVO	2.8	-6	7/337
MC&A	0.87	6	17834
QC	0.7	6	1834
Rad Tech	1.7	6	4,455
Supervisor	0.7	6	1/8/3/4
		Total Man-Hours:	367638
		ODC (@\$0.298/mh)	\$10.620

R1-F08-002

Seventy-nine Metric Tons of Uranium (MTU) (approximately 220 containers) of this material is slated for sale to a private sector customer. The Consent Package/Approval for Sale must be approved by DOE-FN by April 1, 2001 in order to support packaging and shipping the material by the customer's April, 2002 deadline. When the sales contract is finalized, a Change Proposal will be prepared to create new charge accounts for the costs associated with packaging and shipping the material to the customer, and for the revenue received.

This fulfills a commitment to DOE-FN and the Inspector General for closer control of sale material. Care must be taken to assure there is no mixing of the material so the correct material reaches the customer. This material will be baselined for shipment to Portsmouth by the commitment date of June 1, 2002.

The following Plant 1 Pad/Storage crew supports the delivery of containers to the above subtasks.

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	2.0	3	2,621
MVO	2.0	3	2,621
MC&A	0.5	3	655
IH	0.5	3	655
Rad Tech	1.0	3	1,310
Supervisor	0.5	3	655
		Total Man-Hours:	8,517
		ODC (@\$0.298/mh)	\$2,538

3.3) Subtask #3 - Shipping Metal

3.3)1 Plan/Scope - Shipping Metal

Metal shipping will be based in Building 30A. In Building 30A, inventory and shipping labels will be placed on the packages. Shipments will be assembled and the proper documentation will be completed. Drums will be banded to pallets and the pallets loaded onto trailers and secured by Transportation laborers. Box shipments will be loaded onto trailers and secured by Transportation laborers. Shipping Services will be responsible for acquiring transport and overseeing DOT compliance items.

Shipment Quantities - Metal

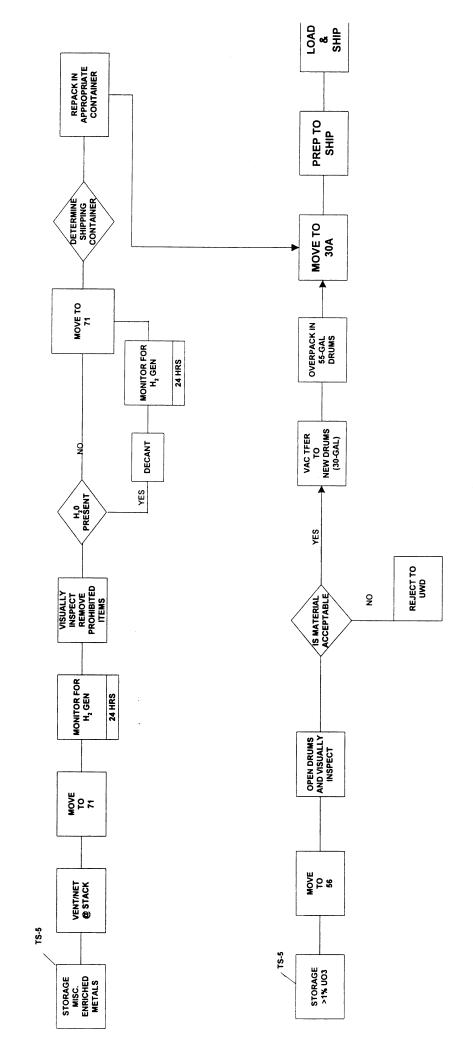
Product Stream	Shippable Containers	Shipments
Normal and Depleted Metal	7	2
Miscellaneous Enriched Metal	3,255	200

3.3)2 Quantification - Shipping Metal

Classification	Average FTE	Duration Quarters)	Total Man-Hours
Hazwat	2.0	6	5,241
MVO	2.0	6	5,241
Trans Laborer	1.0	6	2,621
Prof Whse Attend	0.5	6	1,311
MC&A	0.2	6	524
QC	1.0	6	2,620
Rad Tech	1.0	6	2,620
Supervisor	1.0	6	2,620
		Total Man-Hours:	22,798
		ODC (@\$0.298/mh)	\$6,794

R1-F08-002

MATERIAL FLOW CHART FOR NMD



SECTION 2 2.0 SCHEDULE

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FY04 FY0K FY0R FY07 EY08 EY00 FY04				q		MOCK		NLS				Bar Date Revision hecked/typroved thvity R1-F08-002 R1-F08-003
3 FY04 FYOR FYOR			COMPOUNDS	MATL EQUIP. RECEIPT INSTL. & START-UP	>1% UO3 COMPOUNDS	NUC MAT PRODUCT COMPOUNDS HAMMOCK	entrollenikkönnövinnen men en e	MIMATERIAL RECEIPT NM PRODUCT METALS	MISC. ENRICHED METAL	NUC MAT PRODUCT METAL HAMMOCK	MMISC. NORMAL & DEPLETED METAL	Early Bar Progress Bar Critical Activity
FY01 FY02 FY03	1		MISC COMPOUNDS	-								Sheet for INUCLEAR MATERIALS J.B NUCLEAR MATERIALS DISPOSITION
Orig			182	291	299	299*		291	299	299*	101	LEAR N VUCLEA
Early Finish			DS 250CT01	15MAY02	30MAY02	30MAY02		15MAY02	30MAY02	30MAY02	28JUN01	NU 1.J.B
Early Start	SI	NOILLISC	COMPOUN 04DEC00	04DEC00	04DEC00	04DEC00	ETAL	04DEC00	04DEC00	04DEC00	02JAN01	010EC00 310EC05 010EC00 07SEP01 11:03
Activity Description	PBS 08 - NUCLEAR MATERIALS	1.J.B NUCLEAR MATERIALS DISPOSITION	JNMPC NUCLEAR MATERTIAL PRODUCT COMPOUNDS J9NMPC1600 UF4 AND MISC COMPOUNDS 04DEC00 7	MATL EQUIP. RECEIPT INSTL. & START. IIP	4POUNDS	NUC MAT PRODUCT COMPOUNDS HAMMOCK	JNMPM NUCLEAR MATERIAL PRODUCT METAL	MATERIAL RECEIPT NM PRODUCT METALS	IED METAL	DDUCT METAL	MISC. NORMAL & DEPLETED METAL	Siart Date Finish Date Data Date Run Date
	- NUCLE	JCLEAR M	CLEAR MAT UF4 AND MISC	MATL EQUIP. START-IIP	>1% UO3 COMPOUNDS	NUC MAT PRC HAMMOCK	CLEAR MAT	MATERIAL RE	MISC. ENRICHED METAL	NUC MAT PRODUCT METAL HAMMOCK	MISC. NORMA	FERNALD
Activity ID	J PBS 08	1.1.J.B NL	JOMMPC NU	J9NMPC0005	J9NMPC1200	J9NMPCH03	JN MMNN	J9NMPM0005	J9NMPM1500	J9NMPMH04	J9NMPM1550	FLUOR FERNALD



SECTION 2 3.0 MANPOWER PLANS

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MPS # 1JB01 NUCLEAR MATERIAL PRODUCT COMPOUNDS

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DRIVERS		START DATE	END DATE	101	91	Q1 Q2 Q3	9	8	1 Q2 Q3	3 94	5	8 8	3 03 04		67 2004 Q1 Q2 Q	03 04		FY 2005 Q1 Q2 Q3		2	FY 2006 Q1 Q2 Q3		8	
801 Nuclear Materials Summary	ح	10/02/2000	05/20/2002	×	XX XX	XX	XXX	XX	XX XXX XXX XXX XXX XXX															1
802 Setup of Fac. & Repkg of Uranium Metals	Uranium Metals	10/02/2000	07/18/2001	×	X XXX XXX XXX	X	×																	
803 Setup of Fac. & Repkg of < 1% Uranium	< 1% Uranium	10/02/2000	08/30/2001	×	XX XXX XXX XX	XX	X				_													
804 Facilities Setup for Repkg > 1 WT% U235	> 1 WT% U235	10/02/2000	12/27/2001	×	XXX XXX XXX XXX	XX	XXX	××																
805 Shipment of Nuclear Materials	rials	10/02/2000	01/10/2002	×	X XXX XXX XXX XXX	X	XXX	X	×															
806 Nuc. Material Risk/PPE/SCA/Planning/Whse	CA/Planning/Whse	10/02/2000	05/20/2002	×	XX XX	XX	XXX	XX	XX XXX XXX XXX XXX XXX	J														
807 Small Scale Processing of Nuclear Material	Nuclear Material	10/02/2000	01/30/2001	×	X XX																			
808 UWD Depleted LLW & Depleted Ingots	pleted Ingots	10/02/2000	04/17/2002	×	XX XX	X	XXX	XX	X XXX XXX XXX XXX XXX															
809 Enriched Oxide/Metal & Residue	esidue	10/02/2000	01/06/2003	×	XXX XXX XXX	XX	XXX		XXX XXX XXX XXX	XXX X	XX	×												
810 UWD Planning		10/02/2000	09/30/2003	×	XX XX	×	XXX	XXX	XXX XXX XXX XXX XXX XXX XXX XXX XXX XX	XXX X	××	×××	X	 X										
811 PPE & SCA Support for UWD Activities	WD Activities	07/23/2001	10/16/2003				XXX	XXX	X XXX XXX XXX XXX XXX XXX XXX	XXX X	×	XXX	XX	×										
812 UWD RCRA Materials		02/04/2002	01/20/2004						X	X XXX XXX XXX XXX XXX XXX XX	XX	×××	×	×	×									
813 Feas. Study Processing Uranium Waste	ranium Waste	10/01/2002	06/18/2003								×	XXX XXX XXX	×											
814 UWZ Design/Const/Treat/Ship	Ship	10/02/2003	09/29/2005					-						X	XXX	X XX	X. XX	XX XX	XXX XXX XXX XXX XXX XXX XXX	X				
>1% UO3 General Labor	Hazwat			91.00	· *	<u>+</u>	, ,	7	4	4	0	0	0	0	0	0	ó	0	0	•	0	0	0	
>1% UO3 Transportation Labor		Motor Vehicle Operator		19.50	က	3	ъ	m	в	3	0	0	0	0	0	0	0	0	0	0	0	0	0	
>1% UO3 Procurement	Material	Material Property Control Rep.	Sep.	5.50	0.5 0	5.0.5			-	0	0	0	0	0	0	0	0	0	0		0	0	0	
>1% UO3 QA/QC	QA/QC Tech.	Tech.		5.50	0.5 0	0.5 0.5		-	-	1 0	0	0	0	0	0	0		0	0	0	0	0	0	
>1% UO3 Environmental	Environmental Safety & H Rad Tech	5		12.50	1.5	ed E	2		2	2 0	0	0	0	0	0	0	0	0	0	0	0	•	0	
>1% UO3 Operations	Operation	Operations Manager		7.00	-	-	_		-	0	0	0	0	0	0	0	0	0	0		0	0	0	
>1% UF4 General Labor	Hazwat			34.00	5	-	4	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	•	0	
>1% UF4 Transportation Labor		Motor Vehicle Operator		11.00	•	4	-	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0	
>1% UF4 Procurement	Material	Material Property Control Rep.	.de	2.00	0.5 0	0.5 0.5	5 0.5	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	
>1% UF4 QA/QC	QA/QC Tech.	Tech		1.50	0.5 0	0.5 0.5	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	
>1% UF4 Environmental 9	Environmental Safety & H Rad Tech	ક્		3.00	-	_	-		0	0		0	0	0	0	0	0	0	0	0	0	0	0	
>1% UF4 Operations	Operation	Operations Manager		3.50	-	-	0.5	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
shipping crew General Labor	Hazwat			25.00	S	•	-	4	4	0	0	0	0	0	0	0	.0	0	0	0	0	0	0	
shipping crew Transportation Labor		Motor Vehicle Operator		13.00	က	~	7	~	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
shipping crew QA/QC	QA/QC Tech.	Tech.		6.00	-	-	_	_	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
shipping crew Environmental Safety & H	Safety & H Rad Tech	5		6.00	-	-	_	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
shipping crew Operations	Operation	Operations Manager		6.00	-	-	_	_	-	0	•	0	0	0	0	0	0	0	0	0	0	0	0	
loading crew Transportation Labor		Motor Vehicle Operator		14.00	3 2	2.5 2.5	2	2	2	0	•	0	0	0	0	0	Ö	0	0	0	0	0	0	
loading crew Transportation Labor		Transportation Laborer		12.00	8	8	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

MPS # 1JB01 NUCLEAR MATERIAL PRODUCT COMPOUNDS FY 2007

DRIVERS	START DATE	END DATE	- F	FY 2007 Q1 Q2 Q3 Q4	2	_ ò	FY 2008 Q1 Q2 Q3 Q4	8	<u>م</u> 2	FY 2009 Q1 Q2 Q3 G	2	FY 2010 Q1 Q2 Q	FY 2010 Q1 Q2 Q3 Q4	7	FY 20 Q1 Q2	FY 2011	2	
801 Nuclear Materials Summary	10/02/2000	05/20/2002																1
802 Setup of Fac. & Repkg of Uranium Metals		07/18/2001																
803 Setup of Fac. & Repkg of < 1% Uranium	10/02/2000	08/30/2001												***				
804 Facilities Setup for Repkg > 1 WT% U235	35 10/02/2000	12/27/2001																
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002																
806 Nuc. Material Risk/PPE/SCA/Planning/Whs	Whs 10/02/2000	05/20/2002																
807 Small Scale Processing of Nuclear Material	erial 10/02/2000	01/30/2001																
808 UWD Depleted LLW & Depleted Ingots	10/02/2000	04/17/2002						*			-							
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003																
810 UWD Planning	10/02/2000	09/30/2003																
811 PPE & SCA Support for UWD Activities	07/23/2001	10/16/2003																
812 UWD RCRA Materials	02/04/2002	01/20/2004																
813 Feas. Study Processing Uranium Waste	10/01/2002	06/18/2003																
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005																
General Labor Hazwat	wat		0	0	0		0	0	0	0	0	0	0	Ö	0	0	0	
Transportation Labor Mote	Motor Vehicle Operator		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Procurement Mate	Material Property Control Rep.	d Rep.	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
QAQC	QA/QC Tech.		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health Rad	Rad Tech		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Operations Ope	Operations Manager		0	0	0		0		0	0	0	0	0	0	0	0	0	
General Labor Hazwat	wat		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor Mote	Motor Vehicle Operator		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Procurement Mate	Material Property Control Rep.	il Rep.	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
QA/QC	QA/QC Tech.		0	0	0		0	0	0	0	ō	0	0	0	0	0	0	
Environmental Safety & Health Rad	Rad Tech		0	0	0	-	•	0	0	0	0	0	0	0	0	0 0	0	
Operations Ope	Operations Manager		0	0	0		0	0	0	0	0	0	0	0	0	0 0	0	
General Labor Hazwat	wat		0	0	0		0	0	0	0	0	0	0	0	0	0 0	0	
Transportation Labor Mote	Motor Vehicle Operator		0	0	0		0		0	0	0	0	0	0	0	0	0	
QA/QC QA/(QA/QC Tech.		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health Rad	Rad Tech		0	0			0	0	0	0	0	0	0	0	0	0	0	
Operations Ope	Operations Manager		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor Mote	Motor Vehicle Operator		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor Tran	Transportation Laborer		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

MPS # 1JB01 NUCLEAR MATERIAL PRODUCT COMPOUNDS

				Ŧ	FY 2001	İ	Œ	FY 2002		Ĺ	FY 2003			FY 2004	90			FY 2005	92		u.	FY 2006	ي	
DRIVERS	S	START DATE END DATE	10T	٥	Q1 Q2 Q3 Q4	9	٩	Q1 Q2 Q3 Q4	8	ō	Q1 Q2 Q3 Q4	3 04		ő	Q1 Q2 Q3 Q4	8	δ	Q1 Q2 Q3 Q4	03	2	9	Q1 Q2 Q3 Q4	8	4
loading crew	Procurement	Material Property Control Rep.	3.00	0.5	0.5 0	0.5 0.5	0.5	0.5	0 0	0	0	0	0	0	0	0	0	0	0	0	٥	۰	٥	o
loading crew	QA/QC	QA/QC Tech.	9.00	-	-	-	-	-	0	•	0	0	ò	0	0	•		0	0	0	0	0	0	0
loading crew	· Environmental Safety & H Rad Tech	1 Rad Tech	9.00	-	÷	-	-	-	0 0	•	0	0	0	0	0	•	0	0	0	0	0	0	0	0
loading crew	Transportation Labor	Professional Warehouse Attendent	6.00	-	-	-	-	-	0	•	0	0	0	0	0	-	0	0	0	0	0	0	0	0
loading crew	Operations	Operations Manager	6.00	-	-	-	-	-	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0	•
plant 1 pad crew	plant 1 pad crew General Labor	Hazwat	16.50	3.5	က	3	7	8	0	•	0	0	0	0	0	•	0	0	0	0	0	0	0	0
plant 1 pad crew	plant 1 pad crew Transportation Labor	Motor Vehicle Operator	16.00	က	က	3	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
plant 1 pad crew Procurement	Procurement	Material Property Control Rep.	9.00	-	1 0.5	٠.	0.5	0.5 0.5	0 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
plant 1 pad crew	plant 1 pad crew Environmental Safety & H Rad Tech	1 Rad Tech	6.50	-	-	-	-	1 0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
plant 1 pad crew Operations	Operations	Operations Manager	7.50	-	5.1	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
plant 1 pad crew	plant 1 pad crew Environmental Safety & H Industrial Hygienist Tech.	I Industrial Hygienist Tech.	3.50	0.5	0.5 0.5	5.0.5	9.0	0.5 0.5	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0
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Sheet Totals:

MPS # 1JB01 NUCLEAR MATERIAL PRODUCT COMPOUNDS

ment Materia QA/QC mental Safety & Health Rad Te ritation Labor Operati Labor Hazwat ritation Labor Motor V ment Material mental Safety & Health Rad Tei operatii nental Safety & Health Industrii				FY 2007		•	FY 2008	8		I	FY 2009	60	ı	ı	FY 2010	0		<u>.</u>	FY 2011	Ξ	
Material Property Control Rep. 0 <th< th=""><th>DRIVERS</th><th>START DATE END DATE</th><th>9</th><th>8</th><th>ŏ</th><th></th><th>0 0</th><th>2 Q3</th><th>9</th><th>a</th><th>1 02</th><th>3</th><th>4</th><th>٥</th><th>05</th><th>23 0</th><th>4</th><th> 6</th><th>8</th><th>ခြ</th><th>1 %</th></th<>	DRIVERS	START DATE END DATE	9	8	ŏ		0 0	2 Q3	9	a	1 02	3	4	٥	05	23 0	4	6	8	ခြ	1 %
QA/QC Tech. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Procurement	Material Property Control Rep.	0	0	0	0		0		-		٥	0	٥	۰	٥	0	٥	٥	٥	٥
Rad Tech Professional Warehouse Attendent Operations Manager Hazwat Motor Vehicle Operator Material Property Control Rep. Rad Tech Operations Manager Industrial Hygienist Tech.	QA/QC	QA/QC Tech.	0	0	•	0	0		0			0	0	0	0	0	0	0	0	0	0
Professional Warehouse Attendent Operations Manager Hazwat Motor Vehicle Operator Material Property Control Rep. Rad Tech Operations Manager Industrial Hygienist Tech.	Environmental Safety & Health	Rad Tech	0	0	0	0	0		0			0	0	0	0	0	0	0	0	0	0
Operations Manager Hazwat Motor Vehicle Operator Material Property Control Rep. Rad Tech Operations Manager Industrial Hygienist Tech.	Transportation Labor	Professional Warehouse Attendent	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0
Hazwat Motor Vehicle Operator Material Property Control Rep. Rad Tech Operations Manager Industrial Hygienist Tech.	Operations		0	0	0	0	0			_	٥	0	•	0	0	0	0	0	0	0	0
Motor Vehicle Operator Material Property Control Rep. Rad Tech Operations Manager Industrial Hygienist Tech.	General Labor	Hazwat	0	0	0	0	0			_		0	0	0	0	0	0	0	0	0	0
Material Property Control Rep. Rad Tech Operations Manager Industrial Hygienist Tech.	Transportation Labor	Motor Vehicle Operator	0	0	0	0	0	0		_	0	0	0	0	0	0	0	0	0	0	0
Rad Tech Operations Manager Industrial Hygienist Tech.	Procurement	Material Property Control Rep.	0	0	0	0	0	0	0	_	0	0	0	0	0	0	0	0	0	0	0
Operations Manager Industrial Hygienist Tech.	Environmental Safety & Health	Rad Tech	0	0	0		0	0	0	_	0	0	0	•	0	0	0	0	0	0	0
Industrial Hygienist Tech.	Operations	Operations Manager		0	0	•	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0
	Environmental Safety & Health	ienist 1	0	0	•	0	0		0	_	0	0	0	0	0	0	0	0	0	0	0

MPS # 1JB02 NUCLEAR MATERIAL PRODUCT METALS

SBINES	STABLE		Š	FY 2001	2001	l:	FY 2002	005	Ċ	FY 2003	93	١		FY 2004		-1	FY 2005	2		FY 2006		I
SWARKS	SIAKI DAIE	END DATE	5	<u>و</u>	Q1 Q2 Q3 Q4	۱۶	ő ő	Q1 Q2 Q3 Q4		91 92	03 04	8	õ	Q1 Q2 Q3	9	9	Q1 Q2 Q3	33 Q4		Q1 Q2 Q3		8
801 Nuclear Materials Summary	10/02/2000	05/20/2002	^	XX XX	XXX	×	XX XXX XXX XXX XXX XXX	X														
802 Setup of Fac. & Repkg of Uranium Metals	als 10/02/2000	07/18/2001	^	X XXX XXX XXX	XXX	_																
803 Setup of Fac. & Repkg of < 1% Uranium	n 10/02/2000	08/30/2001	^	XX XXX XXX XXX	XXX	- . 8			-													
804 Facilities Setup for Repkg > 1 WT% U235	35 10/02/2000	12/27/2001	^	XXX XXX XXX XXX	XXX	X	ŏ									_						
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002	^	X XXX XXX XXX XXX	XX	×	×															
806 Nuc. Material Risk/PPE/SCA/Planning/Whse	Whse 10/02/2000	05/20/2002	•	XX	XXX	X	*** *** *** *** *** *** *** ***	×	-													
807 Small Scale Processing of Nuclear Material	erial 10/02/2000	01/30/2001	^	x xxx																		
808 UWD Depleted LLW & Depleted Ingots	10/02/2000	04/17/2002	~	XX XX	XXX	×	X XXX XXX XXX XXX XXX	×														
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003	*	XX XX	XXX	X	XXX	X XXX XXX XXX XXX XXX XXX XXX XXX	×	×												
810 UWD Planning	10/02/2000	09/30/2003	*	XX XX	XXX	X	XXX	*** *** *** *** *** *** *** *** *** **	XX	XX	XXX	XXX										
811 PPE & SCA Support for UWD Activities	07/23/2001	10/16/2003				×	XXX	* *** *** *** *** *** *** *** *** ***	XX	X	XXX	· ·	,									
812 UWD RCRA Materials	02/04/2002	01/20/2004			1	<u> </u>	\$	~ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	}			;									
813 Feas. Study Processing Uranium Waste	10/01/2002	06/18/2003					}		<u> </u>	*** *** ***		*	X X X X X X X X X X									
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005											X X	XXX XXX XXX XXX XXX XXX XXX XXX	XXX	XXX	XXX	×	ŏ			
misc enriched m General Labor	Hazwat		51.00	9	10 10	10	9	o 	0	0	0	0	0	0	0	0	0	0	0	0	0	0
misc enriched m Transportation Labor N	Motor Vehicle Operator		21.00	4 4.5	4	. . 6.	2 2	0	- 0	0	0	0	0	0	0	0	0	0	0	0	0	0
misc enriched m Procurement N	Material Property Control Rep.	eb.	5.80	1 1.3	-	-	0.5 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
misc enriched m QA/QC C	QA/QC Tech.		5.80	1 1.3	-	-	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
misc enriched m Environmental Safety & H Rad Tech	kad Tech		12.50	2 2.5	2	2.5	1.5 2	0	- 0	0	0	0	0	0	0	0	0	0	0	0 0	0	0
misc enriched m Operations C	Operations Manager		5.30	1 1.3	-	-	0.5 0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
decant crew General Labor H	Hazwat		1.50	0	0 1.5		0	0			0	0	0	0	0	0	0	0	0	0	0	0
decant crew Transportation Labor N	Motor Vehicle Operator		0.50	0	0 0.5	0	0	0	0		0	0	0	0	0		0	0	0	0	0	0
decant crew Environmental Safety & H Rad Tech	ad Tech		0.50	0	0 0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
decant crew Operations O	Operations Manager		0.50	0	9.0 0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
decant crew Environmental Safety & H Industrial Hygienist Tech.	dustrial Hygienist Tech.		0.50	0	0 0.5	•	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
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00.0 00.0 00.0 00.0 00.0 00.0 00.0 00.0 00.0 00.0 00.0 00.0 00.0 00.0 00.0 00.0 Sheet Totals:

MPS # 1JB02 NUCLEAR MATERIAL PRODUCT METALS

) [FY 2007			FY 2008	80		Ţ	FY 2009			FY 2010	10			FY 2011	_	
DRIVERS	START DATE	END DATE	۶	Q1 Q2 Q3	3 04	١٥	Q1 Q2 Q3		8	٥	Q1 Q2 Q3	2	ı	Q1 Q2 Q3		8	&	01 02	03 04	l u
801 Nuclear Materials Summary	10/02/2000	05/20/2002																		
802 Setup of Fac. & Repkg of Uranium Metals	Metals 10/02/2000	07/18/2001				materials 1														
803 Setup of Fac. & Repkg of < 1% Uranium	nium 10/02/2000	08/30/2001																		
804 Facilities Setup for Repkg > 1 WT% U235	6 U235 10/02/2000	12/27/2001																		
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002																		
806 Nuc. Material Risk/PPE/SCA/Planning/Whs	ing/Whs 10/02/2000	05/20/2002																		
807 Small Scale Processing of Nuclear Material	Material 10/02/2000	01/30/2001																		
808 UWD Depleted LLW & Depleted Ingots	gots 10/02/2000	04/17/2002																		
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003																		
810 UWD Planning	10/02/2000	09/30/2003																		
811 PPE & SCA Support for UWD Activities	vities 07/23/2001	10/16/2003																		
812 UWD RCRA Materials	02/04/2002	01/20/2004																		
813 Feas. Study Processing Uranium Waste	Vaste 10/01/2002	06/18/2003																		
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005																		
			•	•	,			•	•											
General Labor	Hazwat		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transportation Labor	Motor Vehicle Operator		0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Procurement	Material Property Control Rep	l Rep.	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
QA/QC	QA/QC Tech.		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Environmental Safety & Health	Rad Tech		0	0	0	٠	0	0	0	0	0	0	0	0	0	0	0	•	0	0
Operations	Operations Manager		•	•	0		0	0	0	0	0	0	0	0 0	0	0	0	0	0	0
General Labor	Hazwat		0	0	0		0	0	0	0	0	0	0	0 0	0	0	0	0	0	0
Transportation Labor	Motor Vehicle Operator		0	0	•		0	0	0	0	0	0	0	0 0	0	0	0	0	0	0
Environmental Safety & Health	Rad Tech		0	0	0		0	0	0	0	0	0	0	0 0	0	0	0	0	0	0
Operations	Operations Manager		0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Environmental Safety & Health	Industrial Hygienist Tech	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Sheet Totals:	0.00	00.0	0.00 0.00	00:00	00:0	0.0	0.00	000	0 00 0	0.00 0.00	00.00	00 0	8.0	0.00	0.00	0.00	0.00 00.00	8

SECTION 2 4.0 ESTIMATE

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JNMPC NUCLEAR MATERIAL PRODUCT COMPOUNDS

Page 1 of 3) f3											09/07/2001 8:27 AM
PBS: WBS: CTRL ACCT: CHARGE NO: COMMENT#:	08 1.1.J : JNMP O: JNMPC #: R1-F08-002, 531, 538	·		L	FIUOL F ESTIMATE S FOR ACTIVIT STATEE (1 FTE EC	LOT Fernald, Inc. ESTIMATE SUPPORT WORKSHEET FOR ACTIVITY BASED ESTIMATING STATED IN FY01 DOLLARS (1 FTE EQUALS 1747 HOURS)	J, Inc. (SHEET WATING ARS					DATE: 06-Sep-01 PROJECT MGR: Donald Paine CAM: Donald Paine PREPARED BY: Mary Stone FISCAL YEAR: 2001-2002
Resource: Res Dept:	HAZWAT 946	HAZWAT Overtime:	Cia	EOC: Class: HOU		LABOR						
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	;t: 0st:	Oct 00- Sep 01 40,041.1 40,041.1 1,152,784	Oct 01- Sep 02 17.607.2 57.648.4 533,566 1,686,350	Oct 02- Sep 03 0.0 57,648.4 0	Oct 03- Sep 04 0.0 57,648.4 1,686,350	Oct 04- Sep 05 0.0 57,648.4 0	Oct 05- Sep 06 0.0 57,648.4 0	Oct 06- Sep 07 0.0 57,648.4	Oct 07- Sep 08 0.0 57,648.4	Oct 08- Sep 09 0.0 57,648.4	Oct 09- Sep 10 0.0 57,648.4 0	
Resource: Res Dept:	INDHYG 946	INDUSTRIAL HYGIENIST Overtime:		EOC: Class: SAL		LABOR						
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	t: 38t:	Oct 00- Sep 01 555.0 555.0 25,763 25,763	Oct 01- Sep 02 319.0 874.0 15,587 41,350	Oct 02- Sep 03 0.0 874.0 0	Oct 03- Sep 04 0.0 874.0 41,350	Oct 04- Sep 05 0.0 874.0 0	Oct 05- Sep 06 0.0 874.0 0	Oct 06- Sep 07 0.0 874.0 0	Oct 07- Sep 08 0.0 874.0 0	Oct 08- Sep 09 0.0 874.0 0	Oct 09- Sep 10 0.0 874.0 0	
Resource: Res Dept:	MAT300 946	MATERIAL OBJCLASS300 Overtime:	SS300 Class:	EOC:		MATERIAL						
Yr Units: Cum Units: Yr Total Cost: Cum Total Cost:	i: ist:	Oct 00- Sep 01 1,013,776.5 1,013,777 1,013,777	Oct 01- Sep 02 737,588.5 1,751,365.0 757,503 1,771,280	Oct 02- Sep 03 0.0 1,751,365.0 0 1,771,280	Oct 03- Sep 04 0.0 1,751,365.0 0 1,771,280	Oct 04- Sep 05 0.0 1,751,365.0 0 1,771,280	Oct 05- Sep 06 0.0 1,751,365.0 0 1,771,280	Oct 06- Sep 07 0.0 1,751,365.0 0	Oct 07- Sep 08 0.0 1,751,365.0 0	Oct 08- Sep 09 0.0 1,751,365.0 0 1,771,280	Oct 09- Sep 10 0.0 1,751,365.0 0	
Resource: Res Dept:	MPCREP 946	MATL PROP CTRL REP Overtime:	EP Class:	EOC: ss: SAL		LABOR						
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	;;	Oct 00- Sep 01 3,330,1 3,330,1 107,628	Oct 01- Sep 02 1,538.0 4,868.1 52,321 159,949	Oct 02- Sep 03 0.0 4,868.1	Oct 03- Sep 04 0.0 4,868.1 0	Oct 04- Sep 05 0.0 4,868.1	Oct 05- Sep 06 0.0 4,868.1 0	Oct 06- Sep 07 0.0 4,868.1 0	Oct 07- Sep 08 0.0 4,868.1 0	Oct 08- Sep 09 0.0 4,868.1 0 159,949	Oct 09- Sep 10 0.0 4,868.1 0 159,949	
Resource: Res Dept:	MVOOPR 946	MOTOR VEHICLE OPER Overtime:	PER Class:	EOC:		LABOR						

Page 2 of 3

		Oct 00- Sep 01	Oct 01- Sep 02	Oct 02- Sep 03	Oct 03- Sep 04	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
Yr Hours:		14,649.2	5,854.1	0.0	0.0	6	00 00	/o dec	och no	seb na	Sep 10
Cum Hours:		14,649.2	20,503.3	20,503.3	20.503.3	20.503.3	20.503.3	20.503.3	0.0	0.0	0.0
Yr Total Cost:	±.	422,775	177,834	0	0	0	0	0.000,03	20,303.3	20,503.3	20,503.3
Cum Total Cost:	ost:	422,775	609'009	609'009	609'009	609'009	609'009	609'009	609'009	609'009	609'009
Resource:	OPRMGR	OPERATIONS MGR		: :	-	90					
Res Dept:	946	Overtime:	Class:		Š	Š					
		Oct 00-	Oct 01-	Oct 02-	Oct 03-	49	\$0 50 50	9	6	9	
		Sep 01	Sep 02	Sep 03	Sep 04	Sen 05	Sen G	Ser 05	-/0.00	Oct 08-	Oct 09-
Yr Hours:		6,614.6	2,336.8	0.0	0.0	0.0	0.0	0.0	0.0	9ep 090	oeb 10
Cum Hours:		6,614.6	8,951.3	8,951.3	8,951.3	8,951.3	8,951.3	8,951.3	8,951.3	8,951.3	8,951.3
Cum Total Cost:	t. St:	345,810 345,810	128,589 474,399	0 474,399	0 474,399	0 474,399	0 474,399	0 474,399	0 474,399	0 474.399	0 474 399
Resource:	PARSONS	PARSONS		EOC:	SUB	SUBCONTRACTORS	<u>ـ</u> ـــــــــــــــــــــــــــــــــــ				
Res Dept:	946	Overtime:	Class:	SUB							
		Oct 00-	Oct 01-	Oct 02-	Oct 03-	5	1 0	8	60.00	5	6
		Sep 01	Sep 02	Sep 03	Sep 04	Sen 05	Sen 06	Sen 07	Son Oct	90 100	Oct 09-
Yr Units:		10,000.0	0.0	0.0	0.0	0.0	90 des	/odas	seb ng	60 das	Sep 10
Cum Units:		10,000.0	10,000.0	10,000.0	10,000.0	10,000.0	10,000.0	10,000.0	10,000.0	10,000.0	10,000.0
Cum Total Cost:	st:	10,000	10,000	10,000	10.000	10.000	0 00 01	10 00	0 000	0 0	0
									0	000,01	000
Resource: Res Dept:	PROWHA 946	PROF WAREHOUSE ATTEN	TTEN	, E	LABOR	OR					
•				2							
		Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
Yr Hours:		3ep 01 1,497.6	354.1	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
Cum Hours:		1,497.6	1,851.8	1,851.8	1,851.8	1,851.8	1,851.8	1,851.8	1,851.8	0.0 1,851.8	0.0 1.851.8
Cum Total Cost:	st:	39,792 39,792	9,904 49,696	0 49,696	0 49,696	0 49,696	0 49,696	0 49,696	0 49,696	0 49,696	0 49,696
Resource:	QACTEC	OA/OC TECH		Ċ	000	0					
Res Dept:	946	Overtime:	Class:	SAL	3	ś					
		Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
Yr Hours:		5,012.5	1,750.4	0.0	0.0	0.0	0.0	3ep 0.0	en des	Sep 09	Sep 10
Cum Hours:		5,012.5	6,762.9	6,762.9	6,762.9	6,762.9	6,762.9	6,762.9	6,762.9	6,762.9	6.762.9
Tr Total Cost: Cum Total Cost:	÷	154,786 154,786	56,893 211,680		0 211,680	0 211,680	0 211,680	0 211,680	0 211,680	0 211,680	0 211,680
Beeninge.	Carded			i							
Res Dept:	846 946	KAU IECH Overtime:	Class:	EOC: SAL	LABOR	ĸ					
		Oct 00- Sep 01	Oct 01- Sep 02	Oct 02- Sep 03	Oct 03- Sep 04	Oct 04- Sep 05	Oct 05- Sep 06	Oct 06- Sep 07	Oct 07- Sep 08	Oct 08- Sep 09	Oct 09- Sep 10
S:\EST_FO	S:\EST_FORMS\JNMPC_MOD.xis				EXCLUDES G	EXCLUDES G/A AND ESCALATION COSTS	TION COSTS				

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Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	8,583.4 8,583.4 292,523 292,523	3,641.9 12,225.3 130,642 423,165	0.0 12,225.3 0 423,165	0.0 12,225.3 0 423,165	0.0 12,225.3 0 423,165	0.0 12,225.3 0 423,165	0.0 12,225.3 0 423,165	0.0 12,225.3 0 423,165	0.0 12,225.3 0 423,165	0.0 12,225.3 0 423,165
Resource: SERVSUB Res Dept: 946	SUBS Overtime:	Class:	EOC: SUB	SUE	SUBCONTRACTORS	Ø				
Yr Units: Cum Units: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 26,200.0 26,200.0 26,200	Oct 01- Sep 02 34,400.0 60,600.0 35,329 61,529	Oct 02- Sep 03 0.0 60,600.0 0 61,529	Oct 03- Sep 04 0.0 60,600.0 0 61,529	Oct 04- Sep 05 0.0 60,600.0 61,529	Oct 05- Sep 06 0.0 60,600.0 0	Oct 06- Sep 07 0.0 60,600.0 0 61,529	Oct 07- Sep 08 0.0 60,600.0 0 61,529	Oct 08- Sep 09 0.0 60,600.0 0 61,529	Oct 09- Sep 10 0.0 60,600.0 0
Resource: TRNLAB Res Dept: 946	TRANSPORT LABORER Overtime:	RER Class:	EOC: HOU	LABOR	8 8					
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 3.000.1 3.000.1 74,042	Oct 01- Sep 02 708.3 3,708.3 18,399	Oct 02- Sep 03 0.0 3,708.3 0	Oct 03- Sep 04 0.0 3,708.3 0	Oct 04- Sep 05 0.0 3,708.3	Oct 05- Sep 06 0.0 3,708.3 92,441	Oct 06- Sep 07 0.0 3.708.3 0	Oct 07- Sep 08 0.0 3,708.3 0	Oct 08- Sep 09 0.0 3.708.3 0	Oct 09- Sep 10 0.0 3,708.3 0
Resource: WISE Res Dept: 946	WISE CONSTRUCTION Overtime:	ON Class:	EOC: SUB	SUB	SUBCONTRACTORS	0				
Yr Units: Cum Units: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 25,000.0 25,000.0 25,000	Oct 01- Sep 02 0.0 25,000.0	Oct 02- Sep 03 0.0 25,000.0	Oct 03- Sep 04 0.0 25,000.0	Oct 04- Sep 05 0.0 25,000.0	Oct 05- Sep 06 0.0 25,000.0	Oct 06- Sep 07 0.0 25,000.0	Oct 07- Sep 08 0.0 25,000.0	Oct 08- Sep 09 0.0 25,000.0	Oct 09- Sep 10 0.0 25,000.0
GRAND TOTALS:		000,07	000,02	000,62	000,62	000,62	72,000	25,000	25,000	25,000
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 83,283 6 83,283 6 3,690,879 3,690,879	Oct 01- Sep 02 34,109.8 117,393.4 1,916,568 5,607,447 5,	Oct 02- Sep 03 0.0 117,393.4 1 5,607,447 E	Oct 03- Sep 04 0.0 117,393.4 0 5,607,447	Oct 04- Sep 05 0.0 117,393.4 0 5,607,447	Oct 05- Sep 06 0.0 117,393.4 0 5,607,447	Oct 06- Sep 07 0.0 117,393.4 0 5,607,447	Oct 07- Sep 08 0.0 117,393.4 0 5,607,447	Oct 08- Sep 09 0.0 117,393.4 0 5,607,447	Oct 09- Sep 10 0.0 117,393.4 0 5,607,447

JNMPM NUCLEAR MATERIAL PRODUCT METALS

Page 1 of 3

PBS	80				HOL F	Flior Fernald	Jul 1					
:Sayvi	-										DATE	o iii
WBS: CTRL ACCT:	J.I.I				ESTIMATE S	ESTIMATE SUPPORT WORKSHEET FOR ACTIVITY BASED ESTIMATING	SHEET				PRO	PROJECT MGR: D
CHARGE NO: COMMENT#:					STATEC	**** STATED IN FY01 DOLLARS **** (1 FTE EQUALS 1747 HOURS)	(RS ****				CAM: PREP,	CAM: PREPARED BY: N
												LISCAL LEAR.
Resource: Res Dept:	HAZWAT 946	HAZWAT Overtime:	Class:	EOC:		LABOR						
		Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-	
Yr Hours:		16,467.0	Sep 02 10,735.0	oep 03	sep 04	sep us 0.0	Sep 06 0.0	Sep 07 0.0	Sep 08 0.0	Sep 09 0.0	Sep 10 0.0	
Cum Hours: Yr Total Cost		16,467.0	27,202.0	27,202.0	27,202.0	27,202.0	27,202.0	27,202.0	27,202.0	27,202.0	27,202.0	
Cum Total Cost:	. st:	474,084	799,396	799,396	799,396	799,396	968'662	0 799,396	0 799,396	0 799,396	0 799,396	
Resource:	INDHYG	INDIISTRIAI HYGIENIST	TSIN:	Ċ		acav						
Res Dept:	946	Overtime:	Class:			Š						
		Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-	
Yr Hours:		3ep 01 506.2	366.8	sep 03	0.0	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10	
Cum Hours:		506.2	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	
Cum Total Cost:	. t:	23,497	41,420	41,420	41,420	41,420	41,420	41,420	0 41,420	41,420	0 41,420	
Resource:	MAT300	MATERIAL OBJCLASS300	\SS300	FOC:		MATERIAL						
Res Dept:	946	Overtime:	Class:									
Yr I Inite		Oct 00- Sep 01	Oct 01- Sep 02	Oct 02- Sep 03	Oct 03- Sep 04	Oct 04- Sep 05	Oct 05- Sep 06	Oct 06- Sep 07	Oct 07- Sep 08	Oct 08- Sep 09	Oct 09- Sep 10	
Cum Units:		486,084.2			1,192,109.6	1,192,109.6	1,192,109.6	0.0 1,192,109.6	0.0 1.192.109.6	0.0 1.192.109.6	0.0 1.192.109.6	
Yr Total Cost: Cum Total Cost:	;;	486,084 486,084	725,088 1,211,172		0 1,211,172	0	1,211,172	1,211,172	1,211,172	1,211,172	0 1,211,172	
Resource:	MPCREP	MATL PROP CTRL REP				LABOR						
Res Dept:	946	Overtime:	Class:	s: SAL								
		Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-	
Yr Hours:		3ep 01 1,880.2	3ep 02 1.251.8	3ep 03	sep 04	Sep US	sep des	Sep 0.0	Sep 08	Sep 09	Sep 10	
Cum Hours:		1,880.2	3,132.0	3,132.0	3,132.0	3,132.0	3,132.0	3,132.0	3,132.0	3,132.0	3,132.0	
Yr Total Cost:		60,768	42,585	0	0	0	0	0	0	0	0	
Cum Total Cost:	;;	60,768	103,354	103,354	103,354	103,354	103,354	103,354	103,354	103,354	103,354	
Resource: Res Dept:	MVOOPR 946	MOTOR VEHICLE OPER Overtime:	PER Class:	EOC:		LABOR						

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:	Oct 00- Sep 01	Oct 01- Sep 02	Oct 02- Sep 03	Oct 03- Sep 04	Oct 04- Sep 05	Oct 05- Sep 06	Oct 06- Sep 07	Oct 07- Sep 08	Oct 08- Sep 09	Oct 09- Sep 10
Yr Hours:	7,647.4	5,926.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum Hours: Yr Total Cost:	7,647.4	13,574.0	13,574.0	13,574.0	13,574.0	13,574.0	13,574.0	13,574.0	13,574.0	13,574.0
Cum Total Cost:	220,703	400,739	400,739	400,739	400,739	400,739	400,739	400,739	400,739	0 400,739
Resource: OPRMGR Res Dept: 946	OPERATIONS MGR Overtime:	Class:	EOC: SAL	LABOR	OR					
	Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
Yr Hours:	3ep 01 2,006.6	3ep 02 1,963.4	o.0	Sep U4	Sep U5 0.0	Sep 06 0.0	Sep 07 0.0	Sep 08	Sep 09	Sep 10
Cum Hours:	2,006.6	3,970.0	3,970.0	3,970.0	3,970.0	3,970.0	3,970.0	3,970.0	3,970.0	3,970.0
Yr Total Cost: Cum Total Cost:	104,905 104,905	108,043 212,949	0 212,949	0 212,949	0 212,949	0 212,949	0 212,949	0 212,949	0 212,9 4 9	0 212,949
Resource: PROWHA	PROF WAREHOUSE ATTEN	ATTEN	FOC	0084	a					
Res Dept: 946	Overtime:	Class:		5	ś					
	Oct 00-	Oct 01-	Oct 02-	Oct 03-	0ct 04	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
	Sep 01	Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
Yr Hours: Cum Hours:	0.0	413.0 413.0	0.0 41 3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yr Total Cost:	0	11,550	0	0	0	0	0	0	0.5	4 0.0
Cum Total Cost;	0	11,550	11,550	11,550	11,550	11,550	11,550	11,550	11,550	11,550
Resource: QACTEC	QA/QC TECH	Č	EOC:	LABOR	K.					
		Class	SAL							
:	Oct 00- Sep 01	Oct 01- Sep 02	Oct 02- Sep 03	Oct 03- Sep 04	Oct 04- Sep 05	Oct 05- Sep 06	Oct 06- Sep 07	Oct 07- Sep 08	Oct 08- Sep 09	Oct 09- Sep 10
Yr Hours:	1,500.4	1,596.6	0.0	0.0	0.0	0:0	0.0	0:0	0.0	0.0
Cum Hours: Yr Total Cost:	1,500.4	3,097.0	3,097.0	3,097.0	3,097.0	3,097.0	3,097.0	3,097.0	3,097.0	3,097.0
Cum Total Cost:	46,333	98,228	98,228	98,228	98,228	98,228	98,228	98,228	98,228	98,228
Resource: RADTEC Res Dept: 946	RAD TECH Overtime:	Class:	EOC: SAL	LABOR	ж С					
	Oct 00-	Oct 01-	Oct 02-	Oct 03-	0ct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
	Sep 01	Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
Cum House	4,342.1	3,339.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yr Total Cost:	147.980	119 807	0.2887.0	0.286,1	0.286.7	0.288,7	0.284,7	0.589.7	7,682.0	7,682.0
Cum Total Cost:	147,980	267,787	267,787	267.787	267,787	267,787	267,787	267,787	267,787	267,787
Resource: SERVSUB	SUBS	į	EOC	SUB	SUBCONTRACTORS					
		Class:	908							
AL COM MANNING TOTAL	Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 03- Oct 04- Oct 05-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
				EACLUDES	און בארעונע	6 1603 NOL				

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၁ဝ ယ ယ		Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
0. v		5,000.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ഗ ഗ		10,000.0	10,000.0	10,000.0	10,000.0	10,000.0	10,000.0	10,000.0	10.000.0	10.000.0
ĸ	5,000	5,135	0	0	0	0	0	0	0	C
	5,000	10,135	10,135	10,135	10,135	10,135	10,135	10,135	10,135	10,135
TRANSPOR	TRANSPORT LABORER	~	EOC:	LABOR	ÕR					
Overtime:		Class:	НОП							
O	Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
S	Sep 01	Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
	0.0	826.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	826.0	826.0	826.0	826.0	826.0	826.0	826.0	826.0	826.0
	0	21,458	0	0	0	0	0	0	0	0
	0	21,458	21,458	21,458	21,458	21,458	21,458	21,458	21,458	21,458
O	Oct 00-			Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
eS	Sep 01			Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
34,3				0.0	0.0	0.0	0.0	0.0	0.0	0.0
94,34	34,349.9			0.697,09	0.697,09	60,769.0	0.769.0	0.769.0	0.697.09	0 692 09
1,569,	,569,355 1	1,608,833		0	0	0	0	0	0	0
1,569,355		(7	3,178,188 3	3,178,188	3,178,188	3,178,188	3,178,188	3,178,188	3,178,188	3,178,188

REVIEW TEAM THE MAN TO

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SECTION 2 5.0 RISK PLAN

Risk/Opportunity Identification and Analysis Form

Project: Uranium Product Disposition	Disposition	PBS Number: 8			Total Baseline Dollars (Minimus Cara)	lore (Minimum)	100	101 01			ſ
Evaluator: J. Samples	Date: May 1, 2001	WBS Number: 1.1.J.B				20 110	1967.	50,765,055	0		T
CAM: R. Schulten	Date: May 1, 2001	Control Account Number: JNMP	r: JNMP								T
Project Task	Risk and/or Opportunity	Potential Impact	Internal Or External Driver	Impact Cost s (Maximum Case)	Risk Impact Level	Risk Probability %	Risk Probability Level	Probable Cost \$ (Likeliest Case)	Risk Critical Value	Risk Handling Strategy	
Process changes for hydrogen generating & pyrophoric material	Additional requirements & Slow down the costly steps to movement container handlill and packaging operations	ng and rations	Internal	000'889\$	2		20	2 \$137,600	0	2 Accept	
Repackaging compounds cost more due to unknowns in the material and/or Vacuum Transfer Equipment does not work as expected	Slower, manual repackaging of the material	Schedule and cost impact	Internal	\$4,100,000	r .		04	\$1,640,000	0	3 Accept	
Procurement/delivery delay for shipping containers	Procurement/delivery delay Delays packaging for for shipping containers shipment	Schedule and cost impact	internal	\$200,000	2		50	3 \$100,000		2 Reduce	
Material does not conform Material would root acceptable payloads for special shipping shipping containers (additional bayon expectations)	need ned nd baseline	Additional cost for shipments, schedule delay.	Internal	\$150,000	2		75	4 : \$112,500		3 Accept	
			Total:	\$5,138,000			Total:	\$1,990,100	0		П
Changes in container configuration needed to support regulatory changes	iiring hd al into	Schedule and cost impact	External	\$4,000,000	4	Õ	20	\$800,000		æ	<u> </u>
Portsmouth shuts down or rejects remaining material	Only outlet for this material	Stop shipping NM & must treat the balance remaining on site as waste	External	\$13,000,000	G.	20		3 \$2,600,000		10	
Nuclear material at Portsmouth is declared waste	FEMP would have to pay for treatment and disposal costs	Material would require treatment, packaging, and transport to a disposal facility	External	\$55,300,000	ယ	10		\$5,530,000		ω	
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WBS DICTIONARY CONTROL ACCOUNT/CHARGE NUMBER

U.S. DEPARTMENT OF ENERGY **WORK BREAKDOWN STRUCTURE DICTIONARY** PART II - ELEMENT DEFINITION

PROJECT TITLE	2. DATE OF CONTRACT	
i. Thousan ings	2. DATE OF CONTRACT	
FEMP (DEFENSE)	12/01/2000	
	,, 2000	
3. IDENTIFICATION NUMBER		4. INDEX LINE NO.
DE-AC24-010H20115		60
22 AC24 010H20113		69
5. WBS ELEMENT CODE	6. WBS ELEMENT TITLE	
	•	
1.1.J.C		
1.1.0.0	URANIUM WASTE	
7. APPROVED CP NO.		8. DATE OF CHANGES
		O. DATE OF CHANGES
ORIGINAL SCOPE PER CP# FY01-0	115-0008-00	12/01/2000
9. SYSTEM DESIGN DESCRIPTION	10. BUDGET AND REPORTING NUMBER	
or or a time protection of protection of the pro	10. DODGET AND REPORTING NOWIDER	
CERCLA/ACA	EW05H3080	
11 ELEMENT TACK DESCRIPTION		

11. ELEMENT TASK DESCRIPTION

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This element provides for uranium waste field planning, field characterization, processing, packaging/repackaging, and shipping of metals and compounds to the Nevada Test Site (NTS) or to an approved treatment/disposal facility. Five categories comprise the waste streams addressed under this code: fissile excepted and <1% U235 compounds; fissile excepted and depleted metals; RCRA compounds, RCRA T-Hoppers, and sealed sources; fissile metals; and fissile compounds.

The earned value method for this work package is percent complete.

c. SCOPE OF WORK:

Activities include:

- · Planning for direct work (task order walkdowns and daily safety briefings).
- · Field characterization (visual inspections) and photographs.
- · Process (hydrogen monitoring, decant, vent) containers.
- · Repackage compounds and metals streams for shipment to the Nevada Test Site (NTS), Nuclear Fuel Services, Inc. (NFS), or other approved off-site treatment vendor.
- · Ship repackaged waste.
- · Transport fissile compounds to WPRAP facility for down-blending and loading into rail cars for shipment to Envirocare of Utah, Inc.
- · Package and ship T-Hopper contents for off-site treatment and disposal.

. U.S. DEPARTMENT OF ENERGY WORK BREAKDOWN STRUCTURE DICTIONARY PART II - ELEMENT DEFINITION

1. PROJECT TITLE	2. DATE OF CONTRACT	
FEMP (DEFENSE)	12/01/2000	
3. IDENTIFICATION NUMBER		4. INDEX LINE NO.
DE-AC24-010H20115		69
5. WBS ELEMENT CODE	6. WBS ELEMENT TITLE	
1.1.J.C	URANIUM WASTE	
7. APPROVED CP NO.		8. DATE OF CHANGES
ORIGINAL SCOPE PER CP# FY01-	0115-0008-00	12/01/2000
9. SYSTEM DESIGN DESCRIPTION	10. BUDGET AND REPORTING NUMBER	
CERCLA/ACA	EW05H3080	
11. ELEMENT TASK DESCRIPTION Package and ship sealed so	ources for off-site disposal.	

WORK SCOPE DEFINITION (Control Account)			
1. PROJECT TITLE		2. DATE	
FEMP (DEFENSE)		09/07/2001	Page 1
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME	
1.1.J.C	URANIUM WASTE	1	
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHO	NE	7. WBS ELEMENT MANAGER
46	M. FROST/648-5685		D. PAINE/648-5310
8. BUDGET AND REPORTING NUMBER	JDGET AND REPORTING NUMBER 9. BUDGET TITLE		
EW05H3080	NUCLEAR MATER	IALS	
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW S	SCOPE?		11. ESTIMATED START / COMPLETION DATE
ORIGINAL SCOPE PER CP# FY01-0115-0008-00			12/2000 - 09/2005
12. TASK IDENTIFICATION (CONTROL ACCOUNT)	13. TASK DESCRIPTION (ONE LINE)		
JUWP	URANIUM WASTE		

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This element provides for uranium waste field planning, field characterization, processing, packaging/repackaging, and shipping of metals and compounds to the Nevada Test Site (NTS) or to an approved treatment/disposal facility. Five categories comprise the waste streams addressed under this code: fissile excepted and <1% U235 compounds; fissile excepted and depleted metals; RCRA compounds, RCRA T-Hoppers, and sealed sources; fissile metals; and fissile compounds.

The earned value method for this work package is percent complete.

c. SCOPE OF WORK:

Activities include:

- · Planning for direct work (task order walkdowns and daily safety briefings).
- · Field characterization (visual inspections) and photograhs.
- · Process (hydrogen monitoring, decant, vent) containers.
- · Repackage compounds and metals streams for shipment to the Nevada Test Site (NTS), Nuclear Fuel Services, Inc. (NFS), or other approved off-site treatment vendor.
- · Ship repackaged waste.

Project Manager		Control Account Manager	Control Team Manager	0 .
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WORK SCOPE DEFINITION (Control Account)			
1. PROJECT TITLE		2. DATE	
FEMP (DEFENSE)		09/07/2001	Page 2
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME	
1.1.J.C	URANIUM WASTE	1	
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER
46	M. FROST/648-5685		D. PAINE/648-5310
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE		
EW05H3080 NUCLEAR		RIALS	
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW	SCOPE?	<u>-</u>	11. ESTIMATED START / COMPLETION DATE
ORIGINAL SCOPE PER CP# FY01-0115-0008-00			12/2000 - 09/2005
12. TASK IDENTIFICATION (CONTROL ACCOUNT)	DUNT) 13. TASK DESCRIPTION (ONE LINE)		
JUWP	URANIUM WASTE		

- · Transport fissile compounds to WPRAP facility for down-blending and loading rail cars for shipment to Envirocare of Utah, Inc.
- · Package and ship T-Hopper contents for off-site treatment.
- · Package and ship sealed sources for off-site disposal.

d. WORK SPECIFICALLY EXCLUDED:

- · Operations Assurance manpower to perform Standard Startup Reviews (covered in PBS 12)
- Warehousing of uranium waste. (covered in WBS Element 1.2.C)
- · Planning, characterization, processing, packaging and shipment of nuclear product. (covered in JNMS, JNMP)
- · Routine maintenance of equipment and facilities. (covered in PBS01)
- · Manpower to deliver Personal Protective Equipment and manage the Satellite Clothing Area (SCA) support. (covered in PBS01)
- · Shipping to an international location.
- · Disposition of nuclear materials generated by other remediation activities.
- · Uranium size reduction.
- · On-site hazardous waste treatment.
- · Costs for disposal at NTS or Envirocare of Utah, Inc.

WORK SCOPE DEFINITION (Work Package)				
1. PROJECT TITLE		2. DATE		
FEMP (DEFENSE)		09/07/2001	Page 1	
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME		
1.1.J.C	URANIUM WASTE	E		
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHO	NE	7. WBS ELEMENT MANAGER	
46	M. FROST/648-	-5685	D. PAINE/648-5310	
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE			
EW05H3080 NUCLEAR MATERIALS				
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW	SCOPE?		11. ESTIMATED START / COMPLETION DATE	
ORIGINAL SCOPE PER CP# FY01-0115-0008-00			07/2001 - 02/2002	
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ON	E LINE)		
JUWPA	11001111 BACHTIED AND (-1% COMPOUNDS			

.

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This work package provides for the processing, repackaging and preparation of fissile excepted and <=1% U235 compounds for shipment to NTS.

Fissile excepted and <=1% U235 compounds consists of the following as of December 1, 2000:

- · 108 containers of depleted compounds and trash
- · 3,261 containers of <=1% U235 enriched compounds
- · 31 containers of reject normal compounds
- 45 containers of reject miscellaneous depleted UF4
- · 530 containers of reject <=1% U235 U308
- · 41 containers of reject <=1% U235 miscellaneous compounds
- · 15 containers of fissile excepted compounds

The earned value method for this work package is percent complete.

c. SCOPE OF WORK:

Activities include:

- · Assuring work can be and is performed in a safe manner.
- · Identifying the specific containers associated with each waste stream

	c containers associated Mi	tth each waste stream.
Project Manager	Control Account Manager	Control Team Manager
Told Tan	Dld R	Mary E Stone
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WORK SCOPE DEFINITION (Work Package)			
1. PROJECT TITLE		2. DATE	
FEMP (DEFENSE)		09/07/2001	Page 2
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME	
1.1.J.C	URANIUM WASTE	1	
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHO	NE	7. WBS ELEMENT MANAGER
46	M. FROST/648-5685		D. PAINE/648-5310
BUDGET AND REPORTING NUMBER	9. BUDGET TITLE		
EW05H3080 NUCLEAR MATERIALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW SCOPE? 11. ESTIMATED START / C			11. ESTIMATED START / COMPLETION DATE
ORIGINAL SCOPE PER CP# FY01-0			07/2001 - 02/2002
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ONE	E LINE)	
JUWPA FISSILE EXCEPTED AND <=1% COMPOUNDS			MPOUNDS

- · Implementing task orders for pulling the material from inventory.
- · Locating and removing the material from inventory.
- · Visually inspecting the contents of containers.
- · Decanting containers as necessary.
- · Transporting containers to the packaging area.
- \cdot Supporting independent assessments of work processes and equipment associated with these processes.
- · Packaging and repackaging all compounds for off-site shipment.
- · Transport of repackaged material to a shipment preparation area.
- · Labeling of material for shipment and preparing paperwork for shipment off-site.
- · Shipment of material to NTS.
- · Costs for personal protective equipment, materials and supplies, packaging materials, and packaging equipment.
- \cdot Waste Generator Services (Low Level Waste Project) provides the labor to prepare this population for shipment to NTS.

d. WORK SPECIFICALLY EXCLUDED:

- · Operations Assurance manpower to perform Standard Startup Reviews (covered in PBS 12)
- · Warehousing of uranium waste. (covered in WBS Element 1.2.C)
- · Planning, characterization, processing, packaging and shipment of nuclear product. (covered in JNMS, JNMP)
- · Routine maintenance of equipment and facilities. (covered in PBS01)
- · Manpower to deliver Personal Protective Equipment and manage the Satellite Clothing Area (SCA) support. (covered in PBS01)
- · Shipping to an international location.
- · Disposition of nuclear materials generated by other remediation activities.
- · Uranium size reduction.
- · On-site hazardous waste treatment.
- · Costs for disposal at NTS or Envirocare of Utah, Inc.

WORK SCOPE DEFINITION (Work Package)			
1. PROJECT TITLE		2. DATE	
FEMP (DEFENSE)		09/07/2001	Page 1
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME	
1.1.J.C	URANIUM WASTE		
PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHO	NE	7. WBS ELEMENT MANAGER
46	M. FROST/648-5685		D. PAINE/648-5310
BUDGET AND REPORTING NUMBER	9. BUDGET TITLE		
EW05H3080 NUCLEAR MATERIALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW SCOPE?			11. ESTIMATED START / COMPLETION DATE
ORIGINAL SCOPE PER CP# FY01-0115-0008-00			12/2000 - 09/2003
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ONE LINE)		
JUWPB	FISSILE EXCEPTED AND DEPLETED METAL		

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This work package provides for the processing, repackaging and preparation of fissile excepted and depleted metals for shipment to NTS.

Fissile excepted and depleted metal consists of the following as of December 1, 2000:

- · 1,337 containers of depleted metal
- \cdot 201 containers of depleted ingots and derbies
- · 34 containers of reject normal drums of metal
- \cdot 20 containers of reject miscellaneous depleted metal

The earned value method for this work package is percent complete.

c. SCOPE OF WORK:

Activities include:

- · Assuring work can be and is performed in a safe manner.
- · Identifying the specific containers associated with each waste stream.
- · Implementing task orders for pulling the material from inventory.
- · Locating and removing the material from inventory.

Project Manager	Control Account Manager	Control Team Manager
Ded Ia	Did Pa	Mary E Stone

WORK SCOPE DEFINITION (Work Package)			
1. PROJECT TITLE		2. DATE	T
FEMP (DEFENSE)		09/07/2001	Page 2
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NAME		
1.1.J.C	URANIUM WASTE		
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER
46	M. FROST/648-5685		D. PAINE/648-5310
BUDGET AND REPORTING NUMBER	9. BUDGET TITLE		
EW05H3080	NUCLEAR MATERIALS		
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW SCOPE?			11. ESTIMATED START / COMPLETION DATE
ORIGINAL SCOPE PER CP# FY01-0115-0008-00			12/2000 - 09/2003
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ONE LINE)		
JUWPB	FISSILE EXCEPTED AND DEPLETED METAL		

- · Visually inspecting the contents of containers.
- · Processing (hydrogen monitoring, venting, and decanting) containers as necessary.
- · Transporting containers to the packaging area.
- \cdot Supporting independent assessments of work processes and equipment associated with these processes.
- Packaging all metals for off-site shipment.
- · Transport of repackaged material to a shipment preparation area.
- · Labeling of material for shipment and preparing paperwork for shipment off-site.
- · Shipment of material to NTS.
- · Costs for personal protective equipment, materials and supplies, packaging materials, and packaging equipment.

d. WORK SPECIFICALLY EXCLUDED:

- \cdot Operations Assurance manpower to perform Standard Startup Reviews (covered in PBS 12)
- · Warehousing of uranium waste. (covered in WBS Element 1.2.C)
- · Planning, characterization, processing, packaging and shipment of nuclear product. (covered in JNMS, JNMP)
- · Routine maintenance of equipment and facilities. (covered in PBS01)
- Manpower to deliver Personal Protective Equipment and manage the Satellite Clothing Area (SCA) support. (covered in PBS01)
- Shipping to an international location.
- · Disposition of nuclear materials generated by other remediation activities.
- · Uranium size reduction.
- · On-site hazardous waste treatment.
- · Costs for disposal at NTS or Envirocare of Utah, Inc.

WORK SCOPE DEFINITION (Work Package)					
1. PROJECT TITLE		2. DATE	1		
FEMP (DEFENSE)		09/07/2001	Page 1		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME			
1.1.J.C	URANIUM WASTE	1			
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER		
46	M. FROST/648-5685		D. PAINE/648-5310		
BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	RIALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0115-0008-00 10/2001 - 05/2004			10/2001 - 05/2004		
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ON	E LINE)			
JUWPC	RCRA MATERIAL / SEALED SOURCES				

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This work package provides for the sampling and analysis of the RCRA compounds, packaging the T-Hopper contents for off-site treatment and disposal, and packaging the sealed sources for off-site disposal.

RCRA material / sealed sources consist of the following as of December 1, 2000:

- · 256 containers of <=1% U235 RCRA compounds
- · 132 containers of >1% U235 RCRA compounds
- · 2 T-hoppers
- · 624 sealed sources

The earned value method for this work package is percent complete.

c. SCOPE OF WORK:

Activities include:

- · Assuring work can be and is performed in a safe manner.
- · Identifying the specific containers associated with each waste stream.
- · Implementing task orders for pulling the material from inventory.
- · Locating and removing the material from inventory.
- · Visually inspecting the contents of containers.

Project Manager	Control Account Manager	Control Team Manager
Ded Tai	Dld Pri	Mary E Stone

WORK SCOPE DEFINITION (Work Package)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 2		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME			
1.1.J.C	URANIUM WASTE	E			
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER		
46	M. FROST/648-5685		D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	RIALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0	115-0008-00		10/2001 - 05/2004		
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ON	E LINE)			
JUWPC	RCRA MATERIAL / SEALED SOURCES				

- · Processing (hydrogen monitoring, venting, and decanting) containers as necessary.
- Transporting containers to the packaging area.
- \cdot Supporting independent assessments of work processes and equipment associated with these processes.
- · Packaging materials for off-site shipment.
- · Transport of repackaged material to a shipment preparation area.
- · Labeling of material for shipment and preparing paperwork for shipment off-site.
- · Shipment of material to NTS or other approved facilities.
- · Costs for personal protective equipment, materials and supplies, packaging materials, and packaging equipment.
- · Sampling and analysis of RCRA compounds.
- Transport of >1% U235 RCRA compounds (once re-characterized) for down-blending and loading into railcars at WPRAP facility.
- · Packaging sealed sources for shipment to NTS or other approved facility.
- · Packaging T-Hopper contents for shipment to a treatment facility.
- · Packaging the T-Hoppers for shipment to NTS.

d. WORK SPECIFICALLY EXCLUDED:

- · Operations Assurance manpower to perform Standard Startup Reviews (covered in PBS 12)
- · Warehousing of uranium waste. (covered in WBS Element 1.2.C)
- · Planning, characterization, processing, packaging and shipment of nuclear product. (covered in JNMS, JNMP)
- · Routine maintenance of equipment and facilities. (covered in PBS01)
- · Manpower to deliver Personal Protective Equipment and manage the Satellite Clothing Area (SCA) support. (covered in PBS01)
- · Shipping to an international location.
- · Disposition of nuclear materials generated by other remediation activities.
- · Uranium size reduction.
- · On-site hazardous waste treatment.
- · Costs for disposal at NTS or Envirocare of Utah, Inc.
- · WPRAP blending operations. (covered in PBS05)

WORK SCOPE DEFINITION (Work Package)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 3		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME			
1.1.J.C	URANIUM WASTE				
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER		
46	M. FROST/648-5685		D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	RIALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0115-0008-00 10/2001 - 05/2004			10/2001 - 05/2004		
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ON	E LINE)			
JUWPC	RCRA MATERIAL / SEALED SOURCES				
14. ELEMENT TASK DESCRIPTION					

[·] WPRAP facility operations. (covered in PBS05)

WORK SCOPE DEFINITION (Work Package)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 1		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME			
1.1.J.C	URANIUM WASTE				
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER		
46	M. FROST/648-	5685	D. PAINE/648-5310		
BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	IALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW SCOPE?			11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0115-0008-00		09/2002 - 08/2003			
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ON	E LINE)			
JUWPD	FISSILE COMPO	UNDS			

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This work package provides for the processing, visual inspection, and transport of fissile compounds to the WPRAP facility.

Fissile compounds consist of the following as of December 1, 2000:

- · 1,392 containers of >1% U235 enriched compounds
- · 10 containers of reject >1% U235 U03
- · 145 containers of reject >1% U235 UF4
- · 664 containers of reject >1% U235 U308
- · 180 containers of reject >1% U235 miscellaneous compounds

The earned value method for this work package is percent complete.

c. SCOPE OF WORK:

Activities include:

- · Assuring work can be and is performed in a safe manner.
- · Identifying the specific containers associated with each waste stream.
- · Implementing task orders for pulling the material from inventory.
- · Locating and removing the material from inventory.
- · Visually inspecting the contents of containers.

Project Manager	Control Account Manager	Control Team Manager
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WORK SCOPE DEFINITION (Work Package)					
1. PROJECT TITLE		2. DATE			
FEMP (DEFENSE)		09/07/2001	Page 2		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NAM	ME			
1.1.J.C	URANIUM WASTE				
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER		
46	M. FROST/648-5685		D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	IALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW S	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0115-0008-00			09/2002 - 08/2003		
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ONE	E LINE)			
JUWPD	FISSILE COMPO	UNDS			

- · Processing containers as necessary.
- · Transporting containers to WPRAP facility for soil down-blending.
- · Supporting independent assessments of work processes and equipment associated with these processes.
- · One shift operation to support WPRAP operations.

d. WORK SPECIFICALLY EXCLUDED:

- \cdot Operations Assurance manpower to perform Standard Startup Reviews (covered in PBS 12)
- · Warehousing of uranium waste. (covered in WBS Element 1.2.C)
- \cdot Planning, characterization, processing, packaging and shipment of nuclear product. (covered in JNMS, JNMP)
- · Routine maintenance of equipment and facilities. (covered in PBS01)
- · Manpower to deliver Personal Protective Equipment and manage the Satellite Clothing Area (SCA) support. (covered in PBS01)
- · Shipping to an international location.
- · Disposition of nuclear materials generated by other remediation activities.
- · Costs for disposal at Envirocare of Utah, Inc.
- · WPRAP blending operations. (covered in PBS05)
- · WPRAP facility operations. (covered in PBS05)
- · Transportation costs to Envirocare. (covered in PBS05)

WORK SCOPE DEFINITION (Work Package)					
1. PROJECT TITLE		2. DATE	I		
FEMP (DEFENSE)		09/07/2001	Page 1		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NA	ME			
1.1.J.C	URANIUM WASTE				
5. PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER		
46	M. FROST/648-	5685	D. PAINE/648-5310		
8. BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	IALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW S	SCOPE?		11. ESTIMATED START / COMPLETION DATE		
ORIGINAL SCOPE PER CP# FY01-0115-0008-00			07/2001 - 09/2005		
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ONE	ELINE)			
JUWPE	FISSILE METALS				

a. ELEMENTS OF COST:

Labor Materials Subcontracts ODCs

b. TECHNICAL CONTENT:

This work package provides for the processing (venting, hydrogen monitoring, decanting) and repackaging the fissile metals for shipment to NFS.

Fissile metals consist of the following as of December 1, 2000:

- · 419 containers of <=1% U235 enriched metal
- · 165 containers of >1% U235 enriched metal
- · 10 containers of reject miscellaneous >1% U235 enriched metal

The earned value method for this work package is percent complete.

c. SCOPE OF WORK:

Activities include:

- · Assuring work can be and is performed in a safe manner.
- · Identifying the specific containers associated with each waste stream.
- · Implementing task orders for pulling the material from inventory.
- · Locating and removing the material from inventory.
- · Visually inspecting the contents of containers.
- · Processing (hydrogen monitoring, venting, and decanting) containers as necessary.

Project Manager	Control Account Manager	Control Trans Man
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. WORK SCOPE DEFINITION (Work Package)					
1. PROJECT TITLE		2. DATE	1		
FEMP (DEFENSE)		09/07/2001	Page 2		
3. WBS ELEMENT CODE	4. WBS ELEMENT TITLE/NAME				
1.1.J.C	URANIUM WASTE				
PERFORMING DIV/DEPARTMENT CODE	6. ORIGINATOR NAME/PHONE		7. WBS ELEMENT MANAGER		
46	M. FROST/648-	5685	D. PAINE/648-5310		
BUDGET AND REPORTING NUMBER	9. BUDGET TITLE				
EW05H3080	NUCLEAR MATER	IALS			
10. ORIGINAL SCOPE? / CHANGE TO WORK SCOPE? / NEW S	SCOPE?	11. ESTIMATED START / COMPLETION DAT			
ORIGINAL SCOPE PER CP# FY01-0115-0008-00 07/2001 - 09/2005			07/2001 - 09/2005		
12. TASK IDENTIFICATION (WORK PACKAGE)	13. TASK DESCRIPTION (ON	E LINE)			
JUWPE	FISSILE METALS				

- · Transporting containers to the packaging area.
- \cdot Supporting independent assessments of work processes and equipment associated with these processes.
- · Packaging materials for off-site shipment.
- · Transport of repackaged material to a shipment preparation area.
- \cdot Labeling of material for shipment and preparing paperwork for shipment off-site.
- · Shipment of material to NFS.
- · Costs for personal protective equipment, materials and supplies, packaging materials, and packaging equipment.
- · NFS subcontract to process fissile metals.

d. WORK SPECIFICALLY EXCLUDED:

- · Operations Assurance manpower to perform Standard Startup Reviews (covered in PBS 12)
- · Warehousing of uranium waste. (covered in WBS Element 1.2.C)
- · Planning, characterization, processing, packaging and shipment of nuclear product. (covered in JNMS, JNMP)
- · Routine maintenance of equipment and facilities. (covered in PBS01)
- · Manpower to deliver Personal Protective Equipment and manage the Satellite Clothing Area (SCA) support. (covered in PBS01)
- · Shipping to an international location.
- · Disposition of nuclear materials generated by other remediation activities.
- · NFS Home Office Support

SECTION 3 1.0 NARRATIVE

3. PROJECT TITLE:	2. DATE: 09/10/01	3. PBS#: 08
NUCLEAR MATERIALS DISPOSITION	• • • • • • • • • • • • • • • • • • •	
4. WBS ELEMENT CODE:	5. WBS ELEMENT TITLE	:
1.1.J.C.	URANIUM WASTE	DISPOSITION
6. CAM NAME/ PHONE:	7. CAM SIGNATURE:	
DON PAINE/ROBERT SCHULTEN	0.00	
8. ORIGINAL/ CHANGE SCOPE/ PER CP#:	9.CONTROL ACCOUNT:	JUWP

SECTION 3: JUWP - URANIUM WASTE DISPOSITION

1.0 NARRATIVE

1.1 OVERVIEW

Control account JUWP will provide for uranium waste planning (field supervisor planning to execute task orders, plan work assignments, etc.), characterization, processing, packaging/repackaging, and shipping to the Nevada Test Site (NTS) or to an approved treatment/disposal facility. There are two types of waste, metals and compounds. The waste streams have been divided into five categories: fissile excepted and <1% U²³⁵ compounds (JUWPA); fissile excepted and depleted metals (JUWPB); RCRA compounds, RCRA T-Hoppers and sealed sources (JUWPC); fissile compounds (JUWPD); and fissile metals (JUWPE). The materials will be prepared in accordance with off-site location specifications and applicable transportation guidelines. Fissile excepted material is fissile material that has met the exceptions stated in 49 CFR 173.453.

1.2 ASSUMPTIONS/EXCLUSIONS

1.2.1 Assumptions

R1-D-540

- Project execution will be in Buildings 80, 56A, 71, 77 and 30A. Relocating to other sites will entail increased cost for setup. A minimum of a six-month schedule delay would be realized and cost would depend on the final location.
- Current Department of Transportation (DOT) regulations and requirements for shipping packages and shipment processes do not materially change.
- 3) Over the read transportation routes currently in use remain in use.

Operations will be performed within the authorization basis levels.

- 5) All RCRA material (except the T-Hopper contents) will be re-characterized as low level waste (non-RCRA).
- 6) The UWD Project will, as described in this document, disposition rejected product from the NMD Project.

- 7) T-Hopper contents will be treated offsite by an approved facility.
- 8) Quantities based upon December 1, 2000 waste inventory.
- Sealed source characterization performed at the Department Of Energy Mound facility for Am²⁴¹will be utilized to characterize the FEMP population of sealed sources.
- 10) The fissile metal population currently classified as waste will be re-classified as product material.
- 11) NFS will accept and can process the fissile metals for re-introduction into the fuel cycle.
- 12) If a metal fire occurs during the routine handling (packaging/processing) of potentially pyrophoric material or other reactive metal, the UWD Project will manage the fire per project plans and work instructions and will not impose a stand-down of operations.
- 13) Decant rate is 12 drums per day.
- 14) No size reduction of fissile metal is required for shipment to NFS.
- Work performed by NFS in relation to the fissile metals will be under a subcontract and not home office support.

R1-D-534 DOT will grant shipping exceptions for material that does not fall within the Certificate of Compliance. This is expected to be a small amount of enriched metal. Based on discussions with Shipping Services, pursuing exceptions would be preferable, both cost and schedule-wise, to pursuing certification of new containers.

1.2.2 Exclusions

- Operations Assurance manpower to perform Standard Startup Reviews (SSRs) is excluded.
- 2) Manpower to deliver Personal Protective Equipment (PPE) and manage the Satellite Change Areas is excluded.
- 3) Building maintenance is excluded. Covered by Infrastructure Services.

1.2.3 Government-Furnished Equipment/Services

- 1) DOE provides approved Certificates of Compliance for packaging and shipment of the various metal payloads by January 31, 2001.
- 2) DOE Fernald receives authority to make waste declarations based upon the screening plan.
- 3) DOE HQ approves DOE Fernald authority to make waste declaration of rejected product that does not meet the UMD criteria by October 1, 2001. This population includes materials that have been or are currently wet, that have impurities, or contain scrap material.

R1-D-534

- 4) DOT will grant shipping exceptions for fissile material that does not fall within the Gertificate of Compliance.
- Nevada Test Site (NTS) remains open, approves the NTS Waste Profile and accepts the waste per the approved profile.
- The FEMP will enter into an agreement with the UMD for UMD to take ownership of the fissile metals to be transferred to Nuclear Fuel Services, Inc. (NFS) for storage/processing.
- 7) The UMD will take ownership of materials transferred to NFS.

1.3 DRIVERS

R1-D-540

- 1) Manpower is available to execute the project.
- 2) DOE letter number DOE-0782-99 commitment to remove nuclear waste from site by December 30, 2005.
- 3) The project requires the use of Building 80 through the fourth quarter of FY 03 and Buildings 56A, 30A, 71 and 77 through the third quarter of FY-04.
- 4) The Silo-3 treatment facility is constructed and operational prior to receiving fissile compounds for soil blend down.

1.4 PROJECT PHYSICAL DESCRIPTION

R1-F08-002 The materials managed under control account JUWP consist of 1,595 containers of fissile excepted and depleted metal, 594 containers of fissile metal, 4,031 containers of fissile excepted and <1% U²³⁵ compounds, 2,289 containers of fissile compounds, and 388 containers of RCRA compounds of various enrichments, two RCRA T-Hoppers and 624 sealed sources. (See attached spreadsheet, Exhibit 3 and Exhibit 4.)

PBS-08, NUCLEAR MATERIALS DISPOSITION CLOSURE PLAN BASIS OF ESTIMATE 70000-PL-0008, Revision 1 September 2001

This material will require characterization for disposal and waste profiles for the disposal facilities will be generated. This work is covered in JNMSA.

Project execution will take place in either Building 80, 56A, or 71. Repackaged material will be transferred to Building 30A for shipment preparation. Building 77 will be used for storage of new drums, for interim storage of completed packages, and for labeling for shipment (overflow storage). The project requires the use of Building 80 through the fourth quarter of FY-03 and Buildings 56A, 30A, 71 and 77 through the third quarter of FY-04.

The fissile excepted and $< = 1 \% \ U^{235}$ compounds will be packaged for shipment to NTS by Low Level waste personnel in conjunction with a large inventory of similar material that they are targeting for shipment by the end of FYO1.

The fissile metals require repackaging into quantities of 350 grams or less of U^{235} per drum for transport to NFS for processing.

The fissile compounds require down blending with soil through the Silo 3 treatment facility for disposal at Envirocare of Utah, Inc.

The fissile excepted and depleted metals require repackaging into DOT approved shipping containers for transport to the NTS for disposal.

The > 1% U²³⁵ RCRA compounds (once re-characterized as non-RCRA) require down blending with soil through the Silo 3 treatment facility for disposal at Envirocare of Utah, Inc.

The <1% U²³⁵ RCRA compounds (once re-characterized as non-RCRA) will require packaging for shipment off-site to NTS for disposal.

The RCRA T-Hopper contents require packaging and treatment prior to disposal.

The sealed sources require packaging prior to off-site disposal. On June 13, 2000, DOE-FEMP requested assistance from the Nonactinide Isotopes and Sealed Sources Management Group (NISSMG) in the disposition planning for sealed sources and standards in inventory at the FEMP. The NISSMG is one of three material evaluation teams in the Nuclear Material Integration Project (NMI), a DOE-EM chartered program. The NISS team was assigned responsibility to evaluate all radioactive isotopes with an atomic number less than 90, and all sources, samples, and standards irrespective of atomic number. A number of other radionuclides of elements with atomic number 90 or greater were also evaluated as NISS materials because: 1) they are not part of the Nuclear Materials Management and Safeguards System (NMMSS), 2) they are sealed sources, 3) they are neutron sources, or 4) they are located at small or closure sites (such as Fernald).

Preparation for the packaging/repackaging will entail the material to be located and removed from inventory, vented and decanted, if necessary, and transported to either Building 80, 56A, or 71. Decant water will be collected and transported to the Advanced Waste Water Treatment Plant for treatment. All containers will be inspected for prohibited items, however the project does not expect to find prohibited items in these containers since this inventory was originally slated to be reintroduced as feedstock into the process. The packages will then be moved to Building 30A where they will be labeled and combined into distinct shipments preparatory for shipment to NTS or off-site treatment facility.

1.5 PROJECT PLAN/TECHNICAL SCOPE AND QUANTIFICATION PLAN

1.5.1 JUWPA - Fissile Excepted and < = 1% U²³⁵ Compounds

The Low Level Waste project will provide the manpower to process and package the fissile excepted and < = 1% U²³⁵ compounds for shipment to NTS. The UWD project will budget for the manpower and materials to complete this scope of work.

1) Task #1 - Planning

Planning for fissile excepted and <=1% U²³⁵ compounds disposition includes: assuring all work can be and is performed in the safest manner; identifying the specific containers associated with each waste stream; preparing task orders for pulling the containers from inventory, visually inspecting the containers, decanting the containers if necessary, transporting the containers to the packaging area, packaging, and preparing the final package for shipment; and performing management assessments of work processes and equipment.

2) Task #2 - Characterization

Characterization of this waste (4,031 containers) must be completed prior to shipment for disposal at NTS. Characterization will be an ongoing, iterative process performed in conjunction with the visual inspection process. In order to complete the characterization process, a visual inspection of the waste will be performed by waste characterization field personnel during the processing stage discussed below in Task 3. A digital photograph of the drum contents will be taken during this visual inspection process. The photograph will be downloaded into SWIFTS to assist in the characterization verification process. A written visual inspection form will also be completed that will become part of the permanent characterization file.

- 3) Task #3 Processing
- 3.1) Subtask #1 Reject Miscellaneous Depleted UF4 Processing
- 3.1)1 Plan/Scope Reject Miscellaneous Depleted UF4 Processing

Low Level Waste personnel will, per approved task order inventory request, locate and transport the 45 containers of miscellaneous depleted UF₄ to Building 71 for packaging. These containers have been verified dry by the NMD project and no processing is required.

- 3.2) Subtask #2 Reject Normal Compounds Processing
- 3.2)1 Plan/Scope Reject Normal Compounds Processing

Low Level Waste personnel will, per approved task order inventory request, locate and transport the 31 containers of reject normal compounds to Building 71 for processing. Processing required for the compound streams includes visual inspection to verify no prohibited items and no free liquid, and decanting. All 31 containers of reject normal compounds require decanting. The assumed decant rate is 12 containers per day. At Building 71, LLW personnel will place the containers into a HEPA booth where they will be opened and inspected to determine if the contents contain any prohibited items.

- 3.3) Subtask #3 Depleted Compounds/Trash Processing
- 3.3)1 Plan/Scope Depleted Compounds/Trash Processing

Low Level Waste personnel will, per approved task order inventory request, locate and transport the 108 containers of depleted compounds/trash to Building 71 for processing. Processing required for the compound streams includes visual inspection to verify no prohibited items and no free liquid, and decanting, if necessary. It has been assumed that one-third of the containers (36) require decanting. At Building 71, LLW personnel will place the containers into a HEPA booth where they will be opened and inspected to determine if the contents are dry and free of prohibited items. Any containers requiring decanting will be decanted in Building 71, per approved task order inventory request. The assumed decant rate is 12 containers per day.

- 3.4) Subtask #4 $< = 1\% U^{235}$ Enriched Compounds Processing
- 3.4)1 Plan/Scope < = 1 % U²³⁵ Enriched Compounds Processing

Low Level Waste personnel will, per approved task order inventory request, locate and transport the 3,261 containers of <=1% U²³⁵ enriched compounds to Building 71 for processing. Processing required for the compound streams includes visual inspection to verify no prohibited items and no free liquid, and decanting, if necessary. It has been assumed that one-third of the containers (1,087) require decanting. At Building 71, LLW

personnel will place the containers into a HEPA booth where they will be opened and inspected to determine if the contents are dry and free of prohibited items. Any containers requiring decanting will be decanted in Building 71, per approved task order inventory request. The assumed decant rate is 12 containers per day.

3.5) Subtask #5 - Reject < = 1 % U²³⁵ U₃O₈ Processing

3.5)1 Plan/Scope - Reject < = 1 % U²³⁵ U₃O₈ Processing

Low Level Waste personnel will, per approved task order inventory request, locate and transport the 530 containers of reject <=1% U²³⁵ U₃O₈ to Building 71 for processing. Processing required for the compound streams includes visual inspection to verify no prohibited items and no free liquid, and decanting, if necessary. It has been assumed that one-third of the containers (177) require decanting. At Building 71, LLW personnel will place the containers into a HEPA booth where they will be opened and inspected to determine if the contents are dry and free of prohibited items. Any containers requiring decanting will be decanted in Building 71, per approved task order inventory request. The assumed decant rate is 12 containers per day.

3.6) Subtask #6 - Reject < = 1 % U²³⁵ Miscellaneous Compounds Processing

3.6)1 Plan/Scope - Reject < = 1 % U²³⁵ Miscellaneous Compounds Processing

Low Level Waste personnel will, per approved task order inventory request, locate and transport the 41 containers of reject < = 1% U²³⁵ miscellaneous compounds to Building 71 for processing. Processing required for the compound streams includes visual inspection to verify no prohibited items and no free liquid, and decanting, if necessary. It has been assumed that one-third of the containers (14) require decanting. At Building 71, LLW personnel will place the containers into a HEPA booth where they will be opened and inspected to determine if the contents are dry and free of prohibited items. Any containers requiring decanting will be decanted in Building 71, per approved task order inventory request. The assumed decant rate is 12 containers per day.

3.7) Subtask #7 - >1% U²³⁵ Enriched Fissile Excepted Compounds Processing

3.7)1 Plan/Scope - > 1 % U²³⁵ Enriched Fissile Excepted Compounds Processing

Low Level Waste personnel will, per approved task order inventory request, locate and transport the 15 containers of >1% U²³⁵ enriched fissile excepted compounds to Building 71 for processing. Processing required for the compound streams includes visual inspection to verify no prohibited items and no free liquid, and decanting, if necessary. It has been assumed that one-third of the containers (5) require decanting. At Building 71, LLW personnel will place the containers into a HEPA booth where they will be opened and inspected to determine if the contents are dry and free of prohibited items. Any

containers requiring decanting will be decanted in Building 71, per approved task order inventory request. The assumed decant rate is 12 containers per day.

3.8) Task #3 Quantification - Fissile Excepted and $\leq 1\%$ U²³⁵ Compounds Processing

The processing of the fissile excepted and < = 1% U²³⁵ compounds will be done during the packaging (Task #4 below) performed by LLW personnel. The quantification for the processing is captured in the packaging quantification sections.

4) Task #4 - Packaging

4.1) Subtask #1 - Miscellaneous Depleted UF4 Packaging

4.1)1 Plan/Scope - Miscellaneous Depleted UF4 Packaging

At Building 71, LLW personnel per approved task order will place all 28 containers of this material into an International Shipping Organization (ISO) container. The ISO container will be transferred to the Plant 1 Pad for labeling and preparation for shipping.

4.1)2 Quantification - Miscellaneous Depleted UF4 Packaging

Average FTE	Duration (Quarters)	Total Man-Hours
2.0	1	874
1.0	1	437
0.3	4	131
0.3	1	131
0.3	1	131
0.4	1	174
	Total Man-Hours:	1,878
	ODC (@\$0.298/mh)	\$560
	FTE 2.0 1.0 0.3 0.3 0.3	FTE (Quarters) 2.0 1 1.0 1 0.3 1 0.3 1 0.3 1 0.4 1 Total Man-Hours:

4.2) Subtask #2 - Reject Normal Compounds Packaging

4.2)1 Plan/Scope - Reject Normal Compounds Packaging

At Building 71, LLW personnel per approved task order will place all 31 containers of this material into an ISO container. The ISO container will be transferred to the Plant 1 Pad for labeling and preparation for shipping.

R1-F08-002

4.2)2 Quantification - Reject Normal Compounds Packaging

Classification	Average FTE	Total Man-Hours
Hazwat	3.0	150
MVO	1.0	50
MC&A	0.2	25
Rad Tech	0.4	25
Supervisor	0,4	25
	Total Man-Hours:	275
	ODC (@\$0.298/mh)	\$82

4.3) Subtask #3 - Depleted Compounds/Trash Packaging

4.3)1 Plan/Scope - Depleted Compounds/Trash Packaging

• At Building 71, LLW personnel per approved task order will place 30 containers of this material into an ISO container. The 108 containers of depleted compounds/trash will generate approximately four ISO containers. The ISO containers will be transferred to the Plant 1 Pad for labeling and preparation for shipping.

4.3)2 Quantification - Depleted Compounds/Trash Packaging

Classification	Average FTE	Total
		Man-Hours
Hazwat	2.0	1,404
MVO	0.6	455
HEO	0.2	88
MC&A	0.2	31
Rad Tech	0.3	206
Supervisor	0.2	163
	Total Man-Hours:	2,347
	ODC (@\$0.298/mh)	\$699

4.4) Subtask #4 - < = 1% U²³⁵ Enriched Compounds Packaging

4.4)1 Plan/Scope - < = 1% U²³⁵ Enriched Compounds Packaging

At Building 71, LLW personnel per approved task order will place 30 containers of this material into an ISO container. The 3,261 containers of <=1% U²³⁵ enriched compounds will generate approximately 109 ISO containers. The ISO containers will be transferred to Plant 1 Pad for labeling and preparation for shipping.

R1-F08-002

R1-F08-002

4.4)2 Quantification - < = 1% U²³⁵ Enriched Compounds Packaging

Classification	Average FTE	Total Man-Hours
Hazwat	4.0	2,377
MVØ	2.0	1,068
MC&A	0.5	250
QC	0.2	88
Rad Tech	1.0	511
HEO .	0.3	131
Supervisor	1.0	511
**	Total Man-Hours:	4,936
	ODC (@\$0.298/mh)	\$1,471

- 4.5) Subtask #5 Reject $< = 1\% U^{235} U_3O_8$ Packaging
- 4.5)1 Plan/Scope Reject < = 1% U²³⁵ U₃O₈ Packaging

At Building 71, LLW personnel per approved task order will place 30 containers of this material into an ISO container. The 530 containers of reject < = 1% U²³⁵ U₃O₈ will generate approximately 18 ISO containers. The ISO containers will be transferred to the Plant 1 Pad for labeling and preparation for shipping.

4.5)2 Quantification - Reject < = 1% U²³⁵ U₃O₈ Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	1.0	1	437
MVO	0.6	1	262
MC&A	0.2	1	88
HEO	0.2	1	88
Rad Tech	0.6	1	262
Supervisor	0.2	1	88
		Total Man-Hours:	1,224
		ODC (@\$0.298/mh)	\$364

- 4.6) Subtask #6 Reject $< = 1\% U^{235}$ Miscellaneous Compounds Packaging
- 4.6)1 Plan/Scope Reject < = 1% U²³⁵ Miscellaneous Compounds Packaging

At Building 71, LLW personnel per approved task order will place 30 containers of this material into an ISO container. The 41 containers of reject $\leq 1\%$ U²³⁵ miscellaneous

compounds will generate approximately two ISO containers. The ISO containers will be transferred to Plant 1 Pad for labeling and preparation for shipping.

4.6)2 Quantification - Reject < = 1% U²³⁵ Miscellaneous Compounds Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	0.6	1	262
MVO	0.2	1	88
QC	0.2	1	88
Rad Tech	0.2	1	88
Supervisor	0.2	1	88
		Total Man-Hours:	614
		ODC (@\$0.298/mh)	\$183

4.7) Subtask #7 - >1% U²³⁵ Enriched Fissile Excepted Compounds Packaging

4.7)1 Plan/Scope - > 1% U²³⁵ Enriched Fissile Excepted Compounds Packaging

At Building 71, LLW personnel per approved task order will place all of the containers of this material into an ISO container. The 15 containers of > 1% U²³⁵ enriched fissile excepted compounds will fill approximately one-half of an ISO container. The ISO container, after being filled with other LLW, will be transferred to the Plant 1 Pad for labeling and preparation for shipping.

4.7)2 Quantification - > 1% U²³⁵ Enriched Fissile Excepted Compounds Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	0.2	1	88
MVO	0.2	1	88
Rad Tech	0.2	1	88
Supervisor	0.2	1	88
		Total Man-Hours:	352
		ODC (@\$0.298/mh)	\$105

5) Task #5 - Fissile Excepted and < = 1% U²³⁵ Compounds Shipping

5.1)1 Plan/Scope - Fissile Excepted and $\leq 1\%$ U²³⁵ Compounds Shipping

Approximately 1,700 of the 4,031 containers in this category fall below the $0.9 \% U^{235}$ required by the draft profile to be submitted to NTS for approval. Once that profile is approved and shipments begin, the profile will be amended to include the remainder of the inventory (2,331 containers) that are above the $0.9\% U^{235}$.

R1-F08-002 The initial 1,700 containers will be shipped during the fourth quarter of FY-01 and the remainder (2,331 containers) during the first, second and third quarters of FY-02.

Shipments will be assembled on the Plant 1 Pad for NTS and the proper documentation will be completed. Each shipment will contain a minimum of one ISO container or a maximum of two, not to exceed 40,000 pounds net trailer weight. The ISO containers will be loaded onto trailers and secured by Transportation Laborers. Shipping Services will be responsible for acquiring transport and overseeing DOT compliance issues.

Shipment Quantities - Fissile Excepted and < = 1% U²³⁵ Compounds

Waste Stream	Shippable Containers	Shipments
Miscellaneous depleted UF ₄	2	2
Reject normal compounds	1	1
Depleted compounds & trash	4	4
< = 1% U ²³⁵ enriched compounds	109	109
Reject $< = 1\% \ U^{235} \ U_3O_8$	18	18
Reject miscellaneous compounds	1	1
>1% U ²³⁵ enriched fissile excepted	1	1

5.1)2 Quantification - Fissile Excepted and <= 1% U²³⁵ Compounds Shipping

Classification	Average FTE	Total Man-Hours	
Hazwat	2.0	2,107	
MVQ	2.0	2,107	
MC&A	0.3	263	
Whs. Attend.	0.5	527	
Rad Tech	1.0	1,054	
QC .	1.0	1,054	
Trans labor	1.0	1,054	
Supervisor	1.0	1,054	
	Total Man-Hours:	9,220	
	ODC (@\$0.298/mh)	\$2,747	

R1-F08-002

1.5.2 JUWPB - Fissile Excepted and Depleted Metal

1) Task #1 - Planning

Planning for fissile excepted and depleted metals disposition includes: assuring all work can be and is performed in the safest manner; identifying the specific containers associated with each waste stream; preparing task orders for pulling the containers from inventory, visually inspecting the containers, venting/decanting the containers if necessary, transporting containers to the packaging area, packaging, and preparing the final package for shipment; and performing management assessments of work processes and equipment.

2) Task #2 - Characterization

R1-F08-002 Characterization of this waste (1,595 containers) must be completed prior to shipment for disposal at NTS. Characterization will be an ongoing, iterative process performed in conjunction with the visual inspection process. In order to complete the characterization process, a visual inspection of the waste will be performed by waste characterization field personnel during the processing stage discussed below in Task 3. A digital photograph of the drum contents will be taken during this visual inspection process. The photograph will be downloaded into SWIFTS to assist in the characterization verification process. A written visual inspection form will also be completed that will become part of the permanent characterization file.

3) Task #3 - Processing

Processing required for the metal streams includes visual inspection to verify no prohibited items and no free liquid are present, venting, and decanting if necessary. Due to concerns over potential generation of hydrogen gas and pyrophoricity of uranium metal, guidelines and procedures have been implemented to assure that all containers of uranium metal are tested for the presence of flammable gas, are vented, and are decanted if water is present. Plant 1 Pad/Storage personnel will perform these functions on the containers prior to delivering the containers to UWD for packaging.

3.1) Subtask #1 - Depleted Metal Processing

3.1)1 Plan/Scope - Depleted Metal Processing

This category consists of 1,337 containers of depleted metal. Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate containers, monitor containers for less than 10% Lower Explosive Limit (LEL) of hydrogen, open containers for visual inspection, vent/decant containers if necessary, and transport containers to Building 80. It has been assumed that 25% (334 containers) will require decanting. The assumed decant rate is 12 containers per day.

3.2) Subtask #2 - Depleted Ingots and Derbies (potentially pyrophoric) Processing

3.2)1 Plan/Scope - Depleted Ingots and Derbies Processing

This category consists of five ingots and 196 derbies (potentially pyrophoric). Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate containers, monitor containers for less than 10% Lower Explosive Limit (LEL) of hydrogen. The containers will then be moved to Building 80. The depleted ingots and derbies do not require decanting. Visual inspections of this waste stream have already been completed.

3.3) Subtask #3 - Enriched Fissile Excepted Metals Processing

3.3)1 Plan/Scope - Enriched Fissile Excepted Metals Processing

R1-F08-002 This category consists of 2 containers of enriched fissile excepted metals. Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate containers, monitor containers for less than 10% Lower Explosive Limit (LEL) of hydrogen, open containers for visual inspection, vent/decant containers if necessary, and transport containers to Building 80. The assumption is that one-third of the containers (53) will require decanting. The assumed decant rate is 12 containers per day.

3.4) Subtask #4 - Reject Normal Metal Processing

3.4)1 Plan/Scope - Reject Normal Metal Processing

This category consists of 34 containers of reject normal metal. Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate containers, monitor containers for less than 10% Lower Explosive Limit (LEL) of hydrogen, open containers for visual inspection, vent/decant containers if necessary, and transport containers to Building 80. The containers of reject metal, listed above from the NMD Project, will be decanted before being transferred to the UWD Project. The assumption is that one-third of the containers (12) will require decanting. The assumed decant rate is 12 containers per day.

3.5) Subtask #5 - Reject Miscellaneous Depleted Metal Processing

3.5)1 Plan/Scope - Reject Miscellaneous Depleted Metal Processing

This category consists of 20 containers of reject miscellaneous depleted metal. Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate containers, monitor containers for less than 10% Lower Explosive Limit (LEL) of hydrogen, open containers for visual inspection, vent/decant containers if necessary, and transport containers to Building 80. The containers of reject metal, listed above from the NMD Project, will be decanted before being transferred to the UWD Project

3.6) Task #3 Quantification - Fissile Excepted and Depleted Metal Processing

Decant Crew

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	1.5	2	1,311
MVO	0.5	2	437
Rad Tech	0.5	2	437
IH	0.5	2	437
Supervisor	0.5	2	437
•		Total Man-Hours:	3,059
		ODC (@\$0.298/mh)	\$912

R1-F08-002

Movement Crew

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	2.0	3	2,621
MVO	2.0	3	2,621
MC&A	0.5	3	655
IH	0.5	3	655
Rad Tech	1.0	3	1,310
Supervisor	0.5	3	655
		Total Man-Hours:	8,517
		ODC (@\$0.298/mh)	\$2,538

4) Task #4 - Packaging

4.1) Subtask #1 - Depleted Metal Packaging

4.1)1 Plan/Scope - Depleted Metal Packaging

R1-F08-002 At Building 80, each of the 1,337 drums of metal will have four pounds of absorbent material placed in the annular space between inner drums and any void space will be filled with vermiculite. Two absorbent pads will be placed in the bottom of a TOC type box and six drums of metal will be loaded into the TOC. The boxes will be transported to Building 30A.

4.1)2 Quantification - Depleted Metal Packaging

R1-F08-002

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	6.0	9.0	23,585
MVO	2.0	9.0	7,862
MC&A	0.5	9.0	1,965
QC	0.5	9.0	1,965
Rad Tech	1.0	9.0	3,931
Supervisor	1.0	9.0	1,965
Carpenter	2.8	8-5	10,395
		Total Man-Hours:	41,273
		ODC (@\$0.298/mh)	\$12,299

- 4.2) Subtask #2 Depleted Ingots and Derbies (potentially pyrophoric) Packaging
- 4.2)1 Plan/Scope Depleted Ingots and Derbies (potentially pyrophoric) Packaging

R1-F08-002 At Building 80, the five ingots and 196 derbies (potentially pyrophoric) will be removed from the ISOs and packaged into drums containing four pounds of absorbent material. Inert material (vermiculite) will be required to surround potentially pyrophoric material, totally filling any void space within the drum and between drums. Two absorbent pads will be placed into the bottom of a TOC type box, and up to six drums of metal will be loaded into the TOC. The boxes will be transported to Building 30A.

4.2)2 Quantification - Depleted Ingots and Derbies (potentially pyrophoric) Packaging

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R1- F08-	
002	

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	1.5	1	655
MVO	0.5	1	218
MC&A	0.1	1	44
QC	0.1	1	44
Rad Tech	0.4	1	175
Supervisor	0.2	1	87
		Total Man-Hours:	1,223
		ODC (@\$0.298/mh)	\$364

- 4.3) Subtask #3 Enriched Fissile Excepted Metals Packaging
- 4.3)1 Plan/Scope Enriched Fissile Excepted Metals Packaging

R1-F08-002

At Building 80, each of the 2 drums of metal will have four pounds of absorbent material placed in the annular space between inner drums and any void space will be filled with

vermiculite. Two absorbent pads will be placed in the bottom of a TOC type box and six drums of metal will be loaded into the TOC. The boxes will be transported to Building 30A.

4.3)2 Quantification - Enriched Fissile Excepted Metals Packaging

Total Man-Hours
655
218
44
44
175
44
1,180
\$352

4.4) Subtask #4 - Reject Normal Metal Packaging

4.4)1 Plan/Scope - Reject Normal Metal Packaging

At Building 80, each of the 34 drums of metal will have four pounds of absorbent material placed in the annular space between inner drums and any void space will be filled with vermiculite. Two absorbent pads will be placed in the bottom of a TOC type box and six drums of metal will be loaded into the TOC. The boxes will be transported to Building 30A.

4.4)2 Quantification - Reject Normal Metal Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	1.5	1.	655
MVO	0.5	1	218
MC&A	0.1	1	44
QC	0.1	1	44
Rad Tech	0.4	1	175
Supervisor	0.2	1	87
		Total Man-Hours:	1,223
		ODC (@\$0.298/mh)	\$364

4.5) Subtask #5 - Reject Miscellaneous Depleted Metal Packaging

4.5)1 Plan/Scope - Reject Miscellaneous Depleted Metal Packaging

At Building 80 each of the 20 drums of metal will have four pounds of absorbent material placed in the annular space between inner drums and any void space will be filled with vermiculite. Two absorbent pads will be placed in the bottom of a TOC type box and six drums of metal will be loaded into the TOC. The boxes will be transported to Building 30A.

4.5)2 Quantification - Reject Miscellaneous Depleted Metal Packaging

Classification	Average	Duration	Total
	FTE	(Quarters)	Man-Hours .
Hazwat	1.5	1	655
MVO	0.5	1	218
MC&A	0.1	1	44
QC	0.1	1	44
Rad Tech	0.3	1	131
Carpenters	4.0	1	1,747
Supervisor	0.2	1	87
		Total Man-Hours:	1,179
		ODC (@\$0.298/mh)	\$351

5) Task #5 - Fissile Excepted and Depleted Metal Shipping

5.1) Subtask #1 - Fissile Excepted and Depleted Metal Shipping

5.1)1 Plan/Scope - Fissile Excepted and Depleted Metal Shipping

At Building 30A, shipments will be assembled for NTS and the proper documentation will be completed. Each shipment will contain a minimum of four TOC type boxes not to exceed 40,000 pounds net trailer weight. The boxes will be loaded onto trailers and secured by Transportation Laborers. Shipping Services will be responsible for acquiring transport and overseeing DOT compliance issues.

Shipment Quantities - Fissile Excepted and Depleted Metal

Waste Stream	Shippable Containers	Shipments
Depleted metal	223	56
Depleted ingots & derbies	17	5
Enriched metal fissile excepted	27	6
Reject normal metal	6	~ 2
Reject misc depleted metal	4	1

5.1)2 Quantification - Fissile Excepted and Depleted Metal Shipping/Loading Crew

Classification	Average FTE	Total
•		Man-Hours
Hazwat	4.0	5,584
MVO	4.0	5,584
MC&A	0.5	698
Whse. Attend.	1.0	1,398
Rad Tech	2.0	2,792
QC engineer	2.0	2,792
Trans labor	2.0	2,792
Supervisor	2.0	2,792
	Total Man-Hours:	24,432
	ODC (@\$0.298/mh)	\$7,281

R1-F08-002

1.5.3 JUWPC - RCRA Compounds, T-Hoppers and Sealed Sources

1) Task #1 - Planning

Planning for disposition of this waste stream includes: assuring all work can be and is performed in the safest manner; identifying the specific containers associated with each waste stream; preparing task orders for pulling the containers from inventory, visually inspecting the containers, decanting the containers if necessary, transporting the containers to the packaging/processing area, packaging, and preparing the final package for shipment; and performing management assessments of work processes and equipment to assure readiness for operation.

2) Task #2 - Characterization

Characterization of this waste must be completed prior to shipment. Characterization will be an ongoing, iterative process performed in conjunction with the visual inspection process. Additional sampling and analysis may be required to complete the characterization of the RCRA compounds and T-Hoppers. It is assumed that approximately 150 samples will be required to properly characterize these streams. It is assumed that all the RCRA material will be re-classified as non-RCRA. In addition to sampling and analysis, a visual inspection of the waste will be performed by waste characterization field personnel during the processing stage discussed below in Task 3. A digital photograph of the drum contents will be taken during this visual inspection process. The photograph will be downloaded into SWIFTS to assist in the characterization verification process. A written visual inspection form will also be completed that will become part of the permanent characterization file.

R1-F08-003 Characterization of the >1% U²³⁵ RCRA compounds consists of collection and evaluation of material information for processing and preparation of Envirocare of Utah, Inc. waste profile amendment.

R1-
F08-
002

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	2	2	1,747
MVO	1	2	873
Env science tech	0.25	2	250
Rad Tech	4	2	873
Supervisor	1	2	873
	*	Total Man-Hours:	3,743
		ODC (@\$0.298/mh)	\$1,115

Past sampling on the T-Hoppers indicate they are hazardous for TCLP metals and one T-Hopper is considered to have concentrations of transuranic nuclide concentrations in excess of 100 nCi/g. Both T-Hoppers require treatment for TCLP metals and one requires treatment for transuranic nuclide presence.

It is assumed that sealed source characterization for Am²⁴¹ performed at the Department of Energy Mound facility can be utilized to characterize the FEMP population of sealed sources.

- 3) Task #3 Processing
- 3.1) Subtask #1 >1% U²³⁵ RCRA Compounds Processing
- 3.1)1 Plan/Scope > 1% U²³⁵ RCRA Compounds Processing

Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate and transport the containers to Building 56A for processing. Processing required for the >1% U²³⁵ RCRA compounds includes visual inspection to verify no prohibited items and material pedigree. At Building 56A, UWD personnel will open the 132 containers of >1% U²³⁵ RCRA compounds drums in a HEPA enclosure and inspect the material to ensure it is free of prohibited items and verify the contents per process knowledge. The containers will be returned to storage awaiting process through the WPRAP blending facility.

R1-F08-003

Plant 1 Pad/Storage personnel will transport the containers to the WPRAP blending facility. The WPRAP blending facility will be designed to accommodate this stream for a soil blend-down operation to achieve a homogeneous mixture at less than 0.5 mg/L of U²³⁵. The treatment facility will incorporate drum handling equipment and bulk material feeder that will feed a mixer. The drums will be opened to access the contents and the contents will be introduced into the mixer. The drums themselves will be size reduced and become part

R1-F08-003 of the waste stream as debris. The mixer will be utilized to mix the soil and compounds to the prescribed concentration of U^{235} . Throughput of the WPRAP blending facility is assumed to be 10 drums per day with two shift operation. The blended down > 1% U^{235} RCRA compounds (previously re-characterized as non-RCRA) will be then be handled under the normal WPRAP procedures for pit materials for waste handling, loading, and shipment.

3.2) Subtask #2 - <1% U²³⁵ RCRA Compounds Processing

3.2)1 Plan/Scope - < 1% U²³⁵ RCRA Compounds Processing

Low Level Waste personnel will, per approved task order inventory request, locate and transport the containers to Building 71 for processing. Processing required for the < 1% U^{235} RCRA (previously re-characterized as non-RCRA) compounds stream includes a visual inspection to verify no prohibited items and no free liquids, and decanting if necessary. At Building 71, LLW personnel will open the 256 containers of < 1% U^{235} RCRA compounds drums in a HEPA enclosure and inspect the material to ensure it is dry and free of prohibited items. Any containers requiring decanting will be decanted in Building 71, per approved task order inventory request. It has been assumed that one-third of the 256 (86) containers require decanting. The assumed decant rate is 12 containers per day.

3.3) Subtask #3 - RCRA T-Hoppers Processing

3.3)1 Plan/Scope - RCRA T-Hoppers Processing

Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate and transport the T-Hoppers to Building 56A for processing. The contents of both T-Hoppers will require processing (treatment for TCLP metals content) and one will require treatment to reduce transuranic concentration. Some form of stabilization will be required to treat the TCLP metals. At this time it is assumed that the contents of the T-Hoppers (heel) will be removed and packaged into drums for off-site treatment and subsequent off-site disposal. This work will be performed in Building 56A in a HEPA enclosure.

3.4) Subtask #4 - Sealed Sources Processing

3.4)1 Plan/Scope - Sealed Sources Processing

The FEMP has 624 sealed sources that require packaging for off-site shipment or disposal. Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate and transport the sources to Building 80 for processing. Processing includes a visual inspection of the sources prior to packaging for off-site shipment.

3.5) Task #3 Quantification - RCRA T-Hoppers and Sealed Sources Processing

The processing costs for the processing of the T-Hoppers and Sealed Sources are covered in the manpower tables in Task #4, Packaging.

- 4) Task #4 Packaging
- 4.1) Subtask #1 >1% U²³⁵ RCRA Compounds Packaging
- 4.1)1 Plan/Scope > 1% U²³⁵ RCRA Compounds Packaging

R1-F08-003 The blended down > 1% U²³⁵ RCRA compounds will be handled in accordance with the WPRAP operating procedures. The packaging of this blended down material consists of loading into gondola cars with other pit materials in the WPRAP facilities. This blended down waste stream will be part of the WPRAP profile for disposal at Envirocare of Utah, Inc through a profile amendment. The WPRAP Project will have control over when the gondola cars are loaded.

4.1)2 Quantification - > 1% U²³⁵ RCRA Compounds Packaging

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Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	1.5	1.0	655
MVO	0.5	1.0	218
HEO	0,5	1.0	218
Rad Tech	0.5	1.0	218
IH Tech	0.5	1.0	218
Supervisor	0.5	1.0	2 1 8
		Total Man-Hours:	1,745
•		ODC (@\$0.298/mh)	\$520

- 4.2) Subtask #2 <1% U²³⁵ RCRA Compounds Packaging
- 4.2)1 Plan/Scope <1% U²³⁵ RCRA Compounds Packaging

At Building 71 the 256 drums of <1% U²³⁵ RCRA compounds (previously re-characterized as non-RCRA) will be packed into an ISO container. LLW personnel will place 30 containers of this waste stream into each ISO container, generating approximately 9 shippable containers. The ISO containers will be transported to the Plant 1 Pad for shipment.

4.2)2 Quantification - <1% U²³⁵ RCRA Compounds Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	1.0	1	655
MVO	0.5	.1	218
MC&A	0.1	1	44
Rad-Tech	0.5	1	218
Supervisor	0.2	1	87
		Total Man-Hours:	917
		ODC (@\$0.298/mh)	\$273

R1-F08-002

4.3) Subtask #3 - T-Hoppers Packaging

4.3)1 Plan/Scope - T-Hoppers Packaging

At Building 56A, the contents of the two T-Hoppers will be removed in a HEPA enclosure and packaged into 55-gallon drums for off-site shipment. The drums will be placed on pallets and secured for transport to Building 30A, where they will be staged for shipment.

4.3)2 Quantification - T-Hoppers Packaging

R1- F08- 002

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	7.0	1.5	4,586
MVO	1.5	1.5	983
MC&A	0.5	1.5	328
ac	0.5	1.5	328
Rad Tech	1.0	1.5	655
Supervisor	0.5	1.5	327
		Total Man-Hours:	7,207
		ODC (@\$0.298/mh)	\$2,148

4.4) Subtask #4 - Sealed Sources Packaging

4.4)1 Plan/Scope - Sealed Sources Packaging

At Building 80, the sealed sources will be packaged for off-site shipment for disposal or re-use/recycling. The sources will be packaged into approximately 20 drums for shipment to four different destinations (NTS, Waste Isolation Pilot Plant, US Ecology, and return to vendor). It is assumed that six shipments will be necessary to accomplish this work. The packaged sources will be placed on pallets and secured for transport to Building 30A, where they will be staged for shipment.

4.4)2 Quantification - Sealed Sources Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	7.0	3.5	10,700
MVO	1.5	3.5	2,293
MC&A	0.5	3.5	764
QC	0.5	3.5	764
Rad Tech	1.0	3.5	1,529
Supervisor	0.5	3.5	764
		Total Man-Hours:	16,814
		ODC (@\$0.298/mh)	\$5,010

- 5) Task #5 RCRA Compounds, RCRA T-Hoppers, Sealed Sources Shipping
- 5.1) Subtask #1 > 1% U²³⁵ RCRA Compounds Shipping
- 5.1)1 Plan/Scope > 1% U²³⁵ RCRA Compounds Shipping

The blended down > 1% U²³⁵ RCRA compounds (previously re-characterized as non-RCRA) packaged into gondola cars at the WPRAP facility will be transported to Envirocare of Utah, Inc. by the WPRAP Project. The WPRAP has discretion on the scheduling for shipping this material.

5.1)2 Quantification - > 1 % U²³⁵ RCRA Compounds Shipping

The manpower to load and ship the blended down >1% U²³⁵ RCRA compounds will be provided by PBS 5.

5.2) Subtask #2 - <1% U²³⁵ RCRA Compounds Shipping

5.2)1 Plan/Scope - <1% U²³⁵ RCRA Compounds Shipping

Shipments will be assembled on the Plant 1 Pad for NTS and the proper documentation will be completed. Each shipment will contain a minimum of one ISO container or a maximum of two, not to exceed 40,000 pounds net trailer weight. The ISO containers will be loaded onto trailers and secured by Transportation Laborers. Shipping Services will be responsible for acquiring transport and overseeing DOT compliance issues.

5.2)2 Quantification - < 1 % U²³⁵ RCRA Compounds Shipping

The manpower to ship the <1% U²³⁵ RCRA compounds is covered under the shipping manpower under Charge Number JUWPA.

- 5.3) <u>Subtask #3 <1% U²³⁵ RCRA Compounds, RCRA T-Hoppers and Sealed Sources</u> Shipping
- 5.3)1 Plan/Scope < 1% U²³⁵ RCRA Compounds, RCRA T-Hoppers and Sealed Sources Shipping

The drums and pallets will be transferred to Building 30A where the drums will be labeled and prepared for shipping. In Building 30A, shipments of packaged T-Hopper contents will be assembled for an off-site treatment facility and the proper documentation will be completed. The sealed sources will be assembled for shipment to their final destination. The pallets will be loaded onto trailers and secured by Transportation laborers. ISO containers will be prepared for shipping and loaded onto trailers and secured by Transportation laborers. Shipping Services will be responsible for acquiring transport and overseeing DOT compliance items.

5.3)2 Quantification - <1% U²³⁵ RCRA Compounds, RCRA T-Hoppers and Sealed Sources Shipping

Shipment Quantities - < 1% U²³⁵ RCRA Compounds, T-Hoppers and Sealed Sources

Waste Stream	Shippable Containers	Shipments
<1% U ²³⁵ RCRA compounds	9	9
T-hoppers	2	2
Sealed Sources	20	6

Shipping/Loading Crew For T-Hoppers and Sealed Sources

Classification	Average FTE	Total Man-Hours
Hazwat	2.0	639
MVO	2.0	639
MC&A	0.2	86
Whse, Attend.	0.5	161
Rad Tech	1.0	320
QC engineer	1.0	320
Trans labor	1.0	320
Supervisor	1.0	320
	Total Man-Hours:	2,805
	ODC (@\$0.298/mh)	\$836

R1-F08-003

R1-F08-002

1.5.4 JUWPD - Fissile Compounds

Management of the fissile compounds involves the UWD Project to perform the following activities:

- Preparation of documentation to allow down blending of fissile compounds in the WPRAP blending facility.
- Inspection of drum contents
- Transfer of fissile compound drums to the WPRAP blending facility
 - Provide technical interface with WPRAP personnel and the WPRAP contractor for functional requirements and formulations (blending mixes) to ensure blended material meets requirements
- Provide technical support for the development of transportation, WAC profile, and EPA documentation as well as procedures and operations documentation
- UO₂ material (134 drums of pellets) will be dispositioned through NFS (Section 1.5.5)

Management of the fissile compounds involves the WPRAP Project to perform the following activities:

- WPRAP will develop a waste acceptance criteria detailing the waste it will accept in the WPRAP blending process
- Provide Operations crews to operate the WPRAP blending facility while down blending the fissile compounds
 - Development of documentation relating to the processing of the material (training, operating procedures, SOTs).
- Size-reduce solidified waste materials and dust collector bags.

1) Task #1 - Planning

Planning for fissile compounds disposition includes: assuring all work can be and is performed in the safest manner; identifying the specific containers associated with each waste stream; preparing task orders for pulling the containers from inventory, transporting the containers to the WPRAP blending facility, down-blending the compounds with waste pit materials, and preparing the down-blended stream for shipment; and performing management assessments of work processes and equipment.

Task #2 - Characterization

Characterization of this waste consists of collection and evaluation of material information for processing and preparation of Envirocare of Utah, Inc. waste profile amendment.

Task #3 - Processing

Processing of this waste stream consists of a visual inspection of a portion of the inventory and transport of the containers to WPRAP blending facility for processing.

3.1) Subtask #1 - >1% U²³⁵ Enriched Compounds Processing

3.1)1 Plan/Scope - > 1% U²³⁵ Enriched Compounds Processing

Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate and transport the 1,392 containers of this waste stream to Building 56A for visual inspection to ensure there are no prohibited items or liquids present and to verify the contents per process knowledge. If prohibited items or liquids are present, they will be removed prior to the containers being transferred to the WPRAP blending facility. After the visual inspection, the containers will be returned to storage, awaiting processing through the WPRAP blending facility.

Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate and transport the 1,392 containers of >1% U²³⁵ enriched compounds to the WPRAP blending facility for processing. The WPRAP blending facility will be designed to accommodate this stream for a material blend-down operation to achieve a homogeneous mixture at less than 0.5 mg/L of U²³⁵ or an overall material Uranium 235 enrichment of less than 1%. The blending facility will incorporate drum handling equipment and bulk material feeder that will feed a mixer. The drums will be opened to access the contents and the contents will be introduced into the mixer. The drums themselves will be size reduced and become part of the waste stream as debris. The mixer will be utilized to mix the excavated and characterized pit material and compounds to the prescribed concentration of U²³⁵. Throughput of the WPRAP blending facility is assumed to be 10 drums per day with one shift operation. The blended down compounds will then be handled under the normal WPRAP procedures for pit materials for waste handling, loading and shipment.

Water removed from the containers will be processed through the Advanced Waste Water Treatment Facility. Any prohibited objects will be disposed through the appropriate channels.

3.1)2 - > 1% U²³⁵ Enriched Compounds quantification

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	3.0	2.5	3,275
MVO	1.0	2.5	1,092
HEO	1.0	2.5	1,092
lH Tech	1.0	2.5	1,092
Rad Tech	1.0	2.5	1,092
Supervisor	1.0	2.5	1,092
		Total Man-Hours:	8,735
		ODC (@\$0.298/mh)	\$2,603

3.2) Subtask #4 - Reject >1% U²³⁵ U₃O₈ Processing

3.2)1 Plan/Scope - Reject > 1% U²³⁵ U₃O₈ Processing

Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate and transport the containers of this waste stream to Building 56A for visual inspection to ensure there are no prohibited items or liquids present and to verify the contents per process knowledge. If prohibited items or liquids are present, they will be removed prior to transfer to the WPRAP blending facility. After the visual inspection, the containers will be returned to storage, awaiting processing through the WPRAP blending facility.

Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate and transport the 664 containers of reject > 1% U²³⁵ U₃O₈ to the WPRAP blending facility for processing. The WPRAP blending facility will be designed to accommodate this stream for a material blend-down operation to achieve a homogeneous mixture at less than 0.5 mg/L of U²³⁵ or an overall material Uranium 235 enrichment of less than 1%. The blending facility will incorporate drum handling equipment and bulk material feeder that will feed a mixer. The drums will be opened to access the contents and the contents will be introduced into the mixer. The drums themselves will be size reduced and become part of the waste stream as debris. The mixer will be utilized to mix the excavated and characterized pit material and compounds to the prescribed concentration of U²³⁵. Throughput of the WPRAP blending facility is assumed to be 10 drums per day with one shift operation. The blended down compounds will then be handled under the normal WPRAP procedures for pit materials for waste handling, loading and shipment.

Water removed from the containers will be processed through the Advanced Waste Water Treatment Facility. Any prohibited objects will be disposed through the appropriate channels.

$3.1)2 - > 1\% U^{235} U_3O_8$ guantification

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	3.0	1.0	1,310
MVO	1.0	1.0	437
∃E0	1.0	1.0	437
H Tech	1.0	1.0	437
Rad Tech	1.0	1.0	437
Supervisor	1.0	1.0	437
		Total Man-Hours:	3,495
		ODC (@\$0.298/mh)	\$1,041

3.3) Subtask #5 - Reject > 1% U²³⁵ Miscellaneous Compounds Processing

3.3)1 Plan/Scope - Reject > 1% U²³⁵ Miscellaneous Compounds Processing

This stream does not require a visual inspection as it was already performed under the NMD project. Any container noted to be wet during the previous visual inspection will be

reinspected for free liquids and the liquids removed prior to transfer to the WPRAP blending facility.

This category is comprise of 38 cans of reject > 1% U²³⁵ UF₄, 10 containers of reject > 1% U²³⁵ UO₃ and 180 containers of other reject > 1% U²³⁵ miscellaneous compounds for a total of 228 containers

Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate and transport the 228 containers of reject > 1% U²³⁵ miscellaneous compounds to the WPRAP blending facility for processing. The WPRAP blending facility will be designed to accommodate this stream for a material blend-down operation to achieve a homogeneous mixture at less than 0.5 mg/L of U²³⁵ or an overall material Uranium 235 enrichment of less than 1%. The blending facility will incorporate drum handling equipment and bulk material feeder that will feed a mixer. The drums will be opened to access the contents and the contents will be introduced into the mixer. The drums themselves will be size reduced and become part of the waste stream as debris. The mixer will be utilized to mix the excavated and characterized pit material and compounds to the prescribed concentration of U²³⁵. Throughput of the WPRAP blending facility is assumed to be 10 drums per day with one shift operation. The blended down compounds will then be handled under the normal WPRAP procedures for pit materials for waste handling, loading and shipment.

Water removed from the containers will be processed through the Advanced Waste Water Treatment Facility. Any prohibited objects will be disposed through the appropriate channels.

3.4) Task #3 Quantification - Miscellaneous Compounds Processing

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	3.0	0.5	655
MVO	1.0	0.5	218
HE0	1.0	0.5	218
H Tech	1.0	0.5	218
Rad Tech	1.0	0.5	218
Supervisor	1.0	0.5	218
		Total Man-Hours:	1,745
		ODC (@\$0.298/mh)	\$520

R1-F08-003

- 4) Task #4 Packaging
- 4.1) Subtask #1 >1% U²³⁵ Enriched Compounds Packaging
- 4.1)1 Plan/Scope > 1% U²³⁵ Enriched Compounds Packaging

The blended down > 1% U²³⁵ enriched compounds will be handled in accordance with the WPRAP operating procedures. The packaging of this blended down material consists of loading into gondola cars with other pit materials in the WPRAP facilities. This blended down waste stream will be part of the WPRAP profile for disposal at Envirocare of Utah, inc through a profile amendment. The WPRAP Project will have control over when the gondola cars are loaded.

- 4.1)2 Quantification > 1% U²³⁵ Enriched Compounds Packaging
- The manpower for packaging this waste stream is covered by PBS 5.
- 4.2) Subtask #2 Reject > 1% U²³⁵ U₃O₈ Packaging
- 4.2)1 Plan/Scope Reject > 1% U²³⁵ U₃O₈ Packaging

The blended down reject > 1% U²³⁵ U₃O₈ compounds will be handled in accordance with the WPRAP operating procedures. The packaging of this blended down material consists of loading into gondola cars with other pit materials in the WPRAP facilities. This blended down waste stream will be part of the WPRAP profile for disposal at Envirocare of Utah, Inc through a profile amendment. The WPRAP Project will have control over when the gondola cars are loaded.

- 4.2)2 Quantification Reject > 1% U²³⁵ U₃O₈ Packaging
- The manpower for packaging this waste stream is covered by PBS 5.
- 4.3) Subtask #3 Reject > 1% U²³⁵ Miscellaneous Compounds Packaging
- 4.3)1 Plan/Scope Reject > 1% U²³⁵ Miscellaneous Compounds Packaging

The blended down reject >1% U²³⁵ miscellaneous compounds will be handled in accordance with the WPRAP operating procedures. The packaging of this blended down material consists of loading into gondola cars with other pit materials in the WPRAP facilities. This blended down waste stream will be part of the WPRAP profile for disposal at Envirocare of Utah, Inc through a profile amendment. The WPRAP Project will have control over when the gondola cars are loaded.

R1-F08-003 4.3)2 Quantification - Reject > 1% U²³⁵ Miscellaneous Compounds Packaging

The manpower for packaging this waste stream is covered by PBS 5.

- 5) Task #5 Fissile Compounds Shipping
- 5.1) Subtask #1 Fissile Compounds Shipping
- 5.1)1 Plan/Scope Fissile Compounds Shipping

The blended down fissile compounds packaged into gondola cars at the WPRAP facility will be transported to Envirocare of Utah, Inc. by the WPRAP Project. The WPRAP has discretion on the scheduling for shipping this material.

5.2) Task #5 Quantification - Fissile Compounds Shipping

PBS 5 covers transportation and disposal activities for this waste stream, including sampling and confirmatory analysis.

1.5.5 JUWPE - Fissile Metal

The fissile metal will be shipped to NFS in Erwin, TN for storage and the subsequent processing for the beneficial recycling of a significant portion of the materials for reuse in the nuclear fuel cycle. The recycling effort will be coordinated by the UMD, after the successful build and deployment of an operable pilot scale facility to process the Fernald nuclear materials by NFS. The UMD is currently accepting and managing the disposition of uranium product materials from the FEMP, and this recycling of uranium waste would be a continuation of UMD scope for use of excess DOE uranium materials. NFS has extensive experience processing materials for the Nuclear Navy and for use in the commercial nuclear fuel cycle and is currently performing bench scale testing on Fernald materials to explore recycling. The pilot facility will not only process all of the Fernald materials, it will also provide engineering and operations data for the construction of a large scale treatment facility to process the very large volumes of uranium materials from throughout the DOE complex.

R1-F08-003 134 containers of UO₂ pellets (Section 1.5.4) will also be disposed of through this process.

1) Task #1 - Planning

Planning for fissile metal disposition includes: assuring all work can be and is performed in the safest manner; identifying the specific containers associated with each waste stream; preparing task orders for pulling the containers from inventory, visually inspecting the containers, venting/decanting the containers if necessary, transporting the containers to

the packaging area, packaging, and preparing the final package for shipment; and performing management assessments of work processes and equipment.

2) Task #2 - Characterization

Characterization of this waste must be completed prior to shipment. Characterization will be an ongoing, iterative process performed in conjunction with the visual inspection process. In order to complete the characterization process, a visual inspection of the waste will be performed by waste characterization field personnel during the processing stage discussed below in Task 3. A digital photograph of the drum contents will be taken during this visual inspection process. The photograph will be downloaded into SWIFTS to assist in the characterization verification process. A written visual inspection form will also be completed that will become part of the permanent characterization file. Along with the visual inspection process, pieces of the fissile metal will be measured and weighed to determine the packaging requirements.

3) Task #3 - Processing

Processing required for the fissile metal streams include visual inspection to verify no prohibited items and no free liquid, venting and decanting if necessary.

3.1) Subtask #1 - < = 1% U²³⁵ Enriched Metal Processing

3.1)1 Plan Scope - < = 1% U²³⁵ Enriched Metal Processing

Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate containers of <=1% U²³⁵ enriched metal, monitor containers for less than 10% Lower Explosive Limit (LEL) of hydrogen, open containers for visual inspection, document size and quantity of material in containers, vent/decant containers if necessary, and transport containers to Building 80 or 71. It has been assumed that 25 percent of the 419 (66) containers will require decanting. The assumed decant rate is 12 containers per day.

3.2) Subtask #2 - >1% U²³⁵ Enriched Metal Processing

3.2)1 Plan/Scope - > 1% U²³⁵ Enriched Metal Processing

Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate 165 containers of >1% U²³⁵ enriched metal, monitor containers for less than 10% Lower Explosive Limit (LEL) of hydrogen, open containers for visual inspection, document size and quantity of material in containers, vent/decant containers if necessary, and transport containers to Building 80 or 71. It has been assumed that 25 percent of the 163 (41) containers will require decanting. The assumed decant rate is 12 containers per day.

R1-F08-002

3.3) Subtask #3 - 10 Containers of Reject Miscellaneous Enriched Metal Processing

3.3)1 Plan/Scope - 10 Containers of Reject Miscellaneous Enriched Metal Processing

R1-F08-003

R1-F08-003 Plant 1 Pad/Storage personnel will, per approved task order inventory request, locate 10 containers of reject miscellaneous enriched metal and 134 containers of UO₂ pellets, monitor containers for less than 10% Lower Explosive Limit (LEL) of hydrogen, open containers for visual inspection, document size and quantity of material in containers, vent/decant containers if necessary, and transport containers to Building 80 or 71. It has been assumed that 25 percent of the 10 (3) containers will require decanting. The assumed decant rate is 12 containers per day. The 134 containers of UO₂ pellets will not require decanting.

3.4) Task #3 Quantification - Fissile Metal Processing

Decant Crew

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	1.5	2.0	1,311
MVO	0.5	2.0	437
Rad Tech	0.5	2.0	437
IH	0.5	2.0	437
Supervisor	0.5	2.0	437
		Total Man-Hours:	3,059
		ODC (@\$0.298/mh)	\$912

R1-F08-002

Movement Crew

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	2.0	2	1,747
MVO	2.0	2	1,747
MC&A	0.5	2	437
IH	0.5	2	437
Rad Tech	1.0	2	874
Supervisor	0.5	2	437
		Total Man-Hours:	5,679
		ODC (@\$0.298/mh)	\$1,692

4) Task #4 - Packaging

At Building 80 or 71, the containers must be repackaged to reduce drummed quantities to a DOT approved shipping amount that equals 350 grams or less of U²³⁵. The assumption made for this repackaging is that all of the waste is able to be packaged without any size

reduction, otherwise DOT exemptions will be sought for shipment of any pieces of metal that exceed 350 grams U^{235} .

- 4.1) Subtask #1 < = 1% U²³⁵ Enriched Metal Packaging
- 4.1)1 Plan/Scope < = 1% U²³⁵ Enriched Metal Packaging

R1-F08-002 The 419 containers of < = 1% U²³⁵ enriched metals will be repackaged into 4,203 30/55 combination packages (a 30-gallon drum in a 55-gallon drum) or other approved fissile container. The assumed repackaging rate is four source containers repackaged into 40 drums per day. UWD personnel will place four drums of this material on a pallet for transfer to Building 30A to be staged for shipment.

4.1)2 Quantification - < = 1% U²³⁵ Enriched Metal Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	3.0	1	1,310
MVO	1.0	1	437
MC&A	0.3	1	131
QC	0.3	1	131
Rad Tech	0.5	1	218
Supervisor	0.5	1	218
		Total Man-Hours:	2,445
		ODC (@\$0.298/mh)	\$727

- 4.2) Subtask #2 > 1% U²³⁵ Enriched Metal Packaging
- 4.2)1 Plan/Scope > 1% U²³⁵ Enriched Metal Packaging

R1-F08-002 The $\overline{165}$ containers of >1% U²³⁵ enriched metals will be repackaged into $\overline{1,235}$ 30/55 combo packages (a 30-gallon drum in 55-gallon drum) or other approved fissile container. The assumed repackaging rate is four source containers repackaged into approximately 30 drums. UWD personnel will place four drums of this material on a pallet for transfer to Building 30A to be staged for shipment.

4.2)2 Quantification - > 1 % U²³⁵ Enriched Metal Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	12.0	4.5	23,585
MVO	4.0	4.5	7,862
MC&A	1.0	4.5	1,965
QC	1.0	4.5	1,965
Rad Tech	2.0	4.5	3,931
Supervisor	1.0	4.5	1,965
		Total Man-Hours:	41,273
		ODC (@\$0.298/mh)	\$12,299

4.3) Subtask #3 - Reject Miscellaneous Enriched Metal Packaging

4.3)1 Plan/Scope - Reject Miscellaneous Enriched Metal Packaging

The 10 containers of reject miscellaneous enriched metal will be repackaged into 70 wooden boxes. The assumed repackaging rate is four source containers per day. UWD personnel will place four drums of this material on a pallet for transfer to Building 30A to be staged for shipment.

4.3)2 Quantification - Reject Miscellaneous Enriched Metal Packaging

Classification	Average FTE	Duration (Quarters)	Total Man-Hours
Hazwat	3.0	1	1,310
MVO	1.0	1	437
MC&A	0.2	1	87
QC	0.2	1	87
Rad Tech	0.5	1	218
Supervisor	0.5	1	218
		Total Man-Hours:	2,357
		ODC (@\$0.298/mh)	\$702

5) Task #5 - Fissile Metal Shipping

5.1) Subtask #1 - Fissile Metal Shipping

5.1)1 Plan/Scope - Fissile Metal Shipping

The palletized drums will be transferred to Building 30A for labeling and preparation for shipping. Shipments will be assembled for NFS and the proper documentation will be completed. Each shipment will contain a maximum of 72 drums not to exceed

40,000 pounds net trailer weight. The drums will be loaded onto trailers and secured by Transportation laborers. Shipping Services will be responsible for acquiring transport and overseeing DOT compliance issues.

Shipment Quantities - Fissile Metal

Waste Stream	Shippable Containers	Shipments
$< = 1\% U^{235}$ enriched metal	2,658	37
>1% U ²³⁵ enriched metal	1,220	77
Reject misc enriched metal	70	5

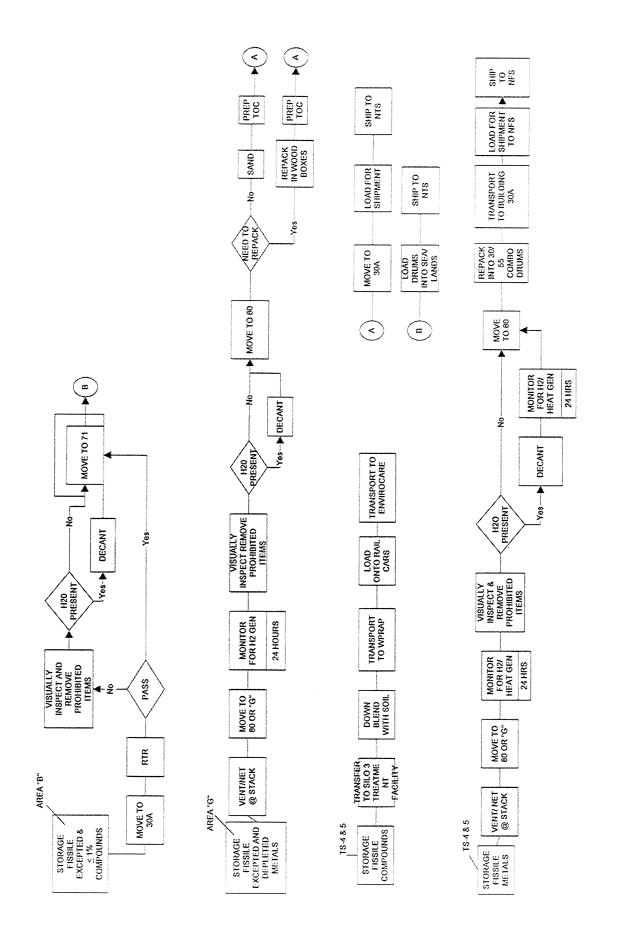
5.1)2 Quantification - Fissile Metal Shipping

Shipping/Loading Crew

Classification	Average FTE	Total Man-Hours
Hazwat	2.0	3,786
MVO	2.0	3,786
MC&A	0.5	473
Whse. Attend.	1.0	946
Rad Tech	1.0	1,893
QC engineer	1.0	1,893
Trans labor	1.0	1,893
Supervisor	1.0	1,893
	Total Man-Hours:	16,563
	ODC (@\$0.298/mh)	\$4,936

R1-F08-002

MATERIAL FLOW CHART FOR



QTY REMANAS OF 1200	9.2	PACKAGUNG AHEA	REPACKAGED	SHIPPING QUANTITY (CONTAINERS)	CALCULATED DECANT DURATION (DAYS 0 12 per	CALCULATED VACUMATRAINER DURATION (DAYS)	CALCULATED PACKAGNO DURATION (DAYS)	PKG RATE OTYDAY	TOTAL DAYS	UMTS	E 2	URWEN 188	GRAMS U235	# SHSPIVENTS REAGINGIO	COMMENTS
E)	CMINES	BULDWO 71	+	*	3	ЖЖ	2	8	\$	ΛΥ	88	\$5,679	45,875	7	11W TO LOAD & SHIP, 30 DRUMS PER (SO, TO HTS
9	\$ SMINO	BULDWG 71	*	-	8	Y.N	-	8	20	, vo	**		1¢A	-	LLW TO LOAD & SHP, 30 DRUMS PER ISO, TO HTS
2	CANS	BULDHG 71	~	*	•	18A	-	8		λ¥Ω	2.5		Υ.	2	LLW TO LOAD & SHIP, 30 DRUMS PER
ĝ	сития	BULDING 71	8	81	8	ΝA	2	8	s	à	217.4	*	8 8 8	8	LLW TO LOAD & SHIP, 30 DRUMS PER ISO, TO HTS
=	CHTMRS	BUILDING 71	82	18	53	**	6.	8	4	Š	2		ž	10	LLW TO LOAD & SHIP, 30 DRUMS PER SO, TO HTS
ĝ.	Cellias	801.08/6 71	-	-	2	N/A	-	8	6	ОАУ	0		KX	-	ILW TO LOAD & SHIP, 30 DRUMS PER ISO, TO NTS
₹	15 CHINRS	BUILDING 71	-	-	-	W.A	-	8		DAY	00	•	3	-	LLW TO LOAD & SHIP, 30 DRUMS PER
Comme	148	804Q4Q80	-	-	-	\$2	-	21	•	OAY	8	-	8	-	Proce to August Boards 13, a post sito
8	Shuks	801(0).00	1,307	æ	8	K.Y	3		\$	OAY	\$ 8009	1,341,770	1288433	š	4 TOCSSHENERT, ASSUME 25% DECANT ADDED 103 CONTABILERS FROM HIW
34 CHITINGS		Se choriose	7	٠	K.Y	10A	2		23	λγο	¥? **		¥2	~	PACK IN MAINT BOXES 1.1, 6 BOXES/TOC.
20 CHTM98	888	BUILDING 80	R	-	KX	33	*	~	~	OAY	7.5		3		PACK BUMANT BOXES 1.1, 6 BOXES/TO
8	201 WOOTS DERBES	BUIL DIRIGI BO	101	*	YSY	ž	8	*	*	OAY	875	12301	77253	•	PACK III MANT BOXES 2-1, 6 BOXES/TOC.
ie Dis	Nuclear Materials Disposition Project - Uranium Waste Disposition Exhibit 3, continued														
OTY REMAINAS OF 1200	su 5	Р АСКОВИЗИВА	REPACKAGED QUANTITY	SHIPPING QUANTITY (CONTAMERS)	CALCULATED DECANT DURATION (DAYS © 12 per day)	CALCULATED VACUUM TRANFER CARATION (DAYS)	CALCULATED PACKAGNIG BURATION (DAYS.)	PKG RATE OTY/OAY	TOTAL DAYS	STEAL OF CONTRACT	URANKUM 165 ORKSHAL	URAZIONA 188 REMANNIA	Gears U) M	SHPMEHIS FIRMANA	SHBWKO
Cumas	\$	BUILDING 80	a	۰	8	N.A		8	2	DAY.	80	2,330	100,034	6	ASSUME WIL BE RECLASSIFED HOW RERA, TRANSFER TO LLW FOR SHEWAIT TO HIS ADDREASE RESULT TO SHEW SHEW SHEW SHEW SHEW SHEW SHEW SHEW
Ž,	_	PLANTIPAD	~	2	**	KX	8		8	OAY				2	IRU/RCRA HEELS IN TWO THOSPIERS
CHINES	ARS	BURLDING 80 BURLDING 71/80	23 44	8 8		\$ \$	8 9		ă Ŧ	ž	ž s	220,575	83) (38	3	PUCKAR BANG BAS RENCKAR LONGO 14 CONTRAR STROMAN LONGO 14 CONTRAR STROMAN PUCKAR BANG BANG BANG BANG BANG BANG BANG BANG
Ž	10 CMTNRS	BU105/071/80	٤	g	_	N,A			s	DAY	27			*	PACKAGE IN BOXES, 7 PIECES PER CONTABLERS, 25% DECANT
#	• Curses			H			K.A.	K.A			***	•	-		3.44 00
OTV REMANAS OF 1200	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	TIW ON ON ON					-	PROCESS RATE	7,100	Yen Charle	URANUM 185 UR	URANIUM LBS			
Commes	18.5	=			-			***************************************					2000		
Ž	CHINAS	=						2	. 3	<u> </u>	0 4 2	10 8% WJ	(6302)		The state of the s
Ę	CWTNRS	-						2	-	DAY	-				STEPS AT 1990 DATE IN THE STATE OF STAT
3		=						2	=	DAY	20				SULPATURED TO SERVENT OF SANCTON
684 CHTHRS	Se							9	*	DAY	71.4				SUPPLY TO BE CARE SERVICE TO SUPPLY TO SUPPLY TO SUPPLY SUPPLY TO SUPPLY
				•	-	•	•	CONTROL STATE OF THE PERSON IN	00000000000000000000000000000000000000					**************************************	-

	NONACTINIDE ISOTOPES AND SEAL ED SOURCES	DSOURCES		 			Γ
					COST DED	TOTAL	
E E	SEALED SOURCE OR STANDARD	ISOTOPE(S)	QTY.	ESTIMATED COST COMMENTS	UNIT	COST	
		4		Waste profiling for NTS LLW			
*	**************************************	U-Z38, IN-ZZ8,	0	disposal: \$50 - \$100 per source	11	: : :	***************************************
	Vicinide Sources-	III-230, III-232	202	zes range,	100.00	28,800.00	
				Disposal as TRU waste: \$100 -			
•••••••			,	\$150 per source range.			
				Characterization for WIPP WAC:			
•••••				\$50,000/drum (piggyback on Mound			
2	2 Actinide Sources-2	Am-241	99	56 Site Characterization).*	150.00	8,400.00	
				\$10,000 per source to return to	0.000000000000000000000000000000000000		T
9	3 Neutron Sources-1	Am/Be	2		10,000.00	20,000.00	
				Return Am/Be source to supplier			Ī
				(\$10,000); Characterize & prepare			**********
				waste profile for Cs-137 sources as			*********
***********				LLW: \$50 - \$100 per source range;	Varies (see		***********
				Disposal as Normally Occurring	Estimated		
		Am/Be, Cs137, Ra-		Radioactive Material (NORM) at US	Cost		
4	4 Orphan Sources-1	226	က	3 Ecology: \$1500 per source range.	Comments)	11,600.00	***************************************
				Waste profiling for NTS LLW	n vide vide op de de la companya de la companya de la companya de la companya de la companya de la companya de		T
**********				disposal: \$50 - \$100 per source			
ဒ	5 Accountable & Exempt Sources	Various	224	224 rango.	100.00	22,400.00	
				Disposal as NORM at US Ecology:			Т
9	6 Accountable & Exempt Sources-2	Ra-226	51	51 \$1500 per source range.	1,500.00	76,500.00	
				Subtotal	***************************************	167,700.00	1
				Packaging**		910,540.80	
				Shipping (assumed 3 @ \$4000)		12,000.00	
				Burial Fee (assumed \$10/1/3/20 drums)		1,480.00	
				Administrative + 10%Contingency***		110,000.00	
				Grand Total		1,201,720,80	

<sup>1,201,720.80

&</sup>quot;If unable to piggyback on Mound Sile's characterization, this estimate would increase by \$2.8 million -- See NISSMG report.

"Based this on March 2001 shipment of 14 standards to BWX where 537 manhours were utilized in packaging (537 divided by 14 = 38.4/standard; 38.4 x 624 x \$38/manhour).

""This covers task orders, material disposition orders, MC&A, etc. and any incidental increase in sealed sources.

			*

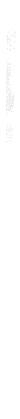
SECTION 3 2.0 SCHEDULE

:	

Activity	Activity	Early	Early	Orig		
J PBS 0	PBS 08 - NUCLEAR MATERIALS					FY10 FY11
1.1.J.C U	.1.J.C URANIUM WASTE					
JUWPA FIR		DS		1		-
J90WPAZ1C0	DEPLETED COMPOUNDS/TRASH	11JUL.01*	18JUL01	က	DEPLETED COMPOUNDS/TRASH	
J9UWPA0005	MATERIAL RECEIPT FISSILE EXCEPTED <1% COMPOUNDS	11JUL01	24JAN02	108	MATERIAL RECEIPT FISSILE EXCEPTED <1% COMPOUNDS	
J9UWPAH000	-	11JUL01	07FEB02	116*	FISSILE EXCEPTED <1% COMPOUNDS	
J9UWPAH05	U WASTE <1% COMPOUNDS HAMMOCK	11JUL01	07FEB02	116*	WASTE <1% COMPOUNDS HAMMOCK	
J9UWPA24A0	<u> </u>	16JUL.01	07JAN02	95	The service of the compounds	
J9UWPA03R0	REJECTED NORMAL COMPOUNDS	02JAN02	09JAN02	5	REJECTED NORMAL COMPOUNDS	
J9UWPA09R0	REJECTED DEPLETED UF4	03JAN02	16JAN02	8	REJECTED DEPLETED UF4	
J9UWPA18R0	REJECTED <1% U3O8	07JAN02	31JAN02	16	REJECTED <1% U308	
J9UWPA19R0	REJECTED <1% MISC. COMPOUNDS	22JAN02	05FEB02	6	REJECTED <1% MISC. COMPOUNDS	
J9UWPA24B0	>1% ENRICHED COMPOUNDS FISSILE EXCEPTED	23JAN02	07FEB02	10	1% ENRICHED COMPOUNDS FISSILE EXCEPTED	
J9UWPAMS03	1		07FEB02	0	COMPLETE DISP OF FISSILE EXCEPTED <1% COMPOUNDS	•
JUWPB FIS	JUWPB FISSILE EXCEPTED DEPLETED METALS	ALS		-		
J9UWPB21B0	DEPLETED INGOTS & DERBIES	04DEC00	14AUG03	542	DEPLETED INGOTS & DERBIES	
1900МРВН000	FISSILE EXCEPTED DEPLETED METALS	04DEC00	17SEP03	200*	FISSILE EXCEPTED DEPLETED METALS	
Jauwpbhos	U WASTE <1% METAL HAMMOCK	04DEC00	17SEP03	\$09\$	U WASTE <1% METAL HAMMOCK	
J9UWPB0030	FISSILE EXCEPTED DEPLETED METALS DECANTING	27MAR01*	16APR03	412	FISSILE EXCEPTED DEPLETED METALS DECANTING	
19UWPB0005	MATERIAL RECEIPT FISSILE EXCEPTED DEPLTD METALS	15MAY01	01JUL03	426	MATERIAL RECEIPT FISSILE EXCEPTED DEPLTD METALS	TALS
J9UWPB21A0	DEPLETED METAL	04JUN01*	01JUL03	416	PER METAL DEPLETED METAL	
J9UWPB24C0	ENRICHED METALS FISSILE EXCEPTED	07AUG03*	19AUG03	1	NENRICHED METALS FISSILE EXCEPTED	-
J9UWPB02R0		12AUG03	04SEP03	4	REJECTED DRUMS OF NORMAL METAL	
		01DEC00 BLCF 31DEC05			Sheet 1 of 3 parameters are seen to 1 and	
FLUOR	FLUOR FERNALD Run Date 078	07SEP01 11:01		NOCLEAR MATERIALS 1.1.1.C URANIUM WASTE	Frogress Bar Critical Activity	
© Drimavora	© Primovara Svetame Inc					
	Openino, mo.					

Activity	Activity	Early	Early	Orig	
	Description			Dur FY01	01 FY02 FY03 FY04 FY06 FY06 FY07 FY08 FY09 FY10 FY11
JOWNPBOTRO R	RO REJECTED MISC. DEPLETED METAL	03SEP03	17SEP03	6	REJECTED MISC. DEPLETED METAL
J9UWPBMS04 C	COMPLETE DISP. OF FISSILE EXCEPTED DEPLTD METALS		17SEP03	0	♦COMPLETE DISP. OF FISSILE EXCEPTED DEPLTD METALS
JUWPC RCR	JUWPC RCRA MATERIAL/SEALED SOURCES				
J9UWPC0020 S	SAMPLING & ANALYSIS	010CT01*	04APR02	102	SAMPLING & ANALYSIS
J9UWPCH07 F	RCRA MATERIAL/SEALED SOURCES HAMMOCK	01OCT01	26AUG03	382*	RCRA MATERIAL/SEALED SOURCES HAMMOCK
J9UWPCH000 R	RCRA MATERIAL/SEALED SOURCES	010CT01	28AUG03	384*	RCRA MATERIAL/SEALED SOURCES
J9UWPC26A0 <	<1% RCRA COMPOUNDS	07FEB02	04MAR02	13	I<1% RCRA COMPOUNDS
Jauwpcooos N	MATERIAL RECEIPT RCRA MATERIAL & SEALED SOURCES	07FEB02	26AUG03	312*	MATERIAL RECEIPT RCRA MATERIAL & SEALED SOURCES
J9UWPC2900 T	T-HOPPERS	01JUL02*	25FEB03	130	T-HOPPERS
J9UWPC2800	SEALED SOURCES	010CT02*	26AUG03	182	SEALED SOURCES
J9UWPCMS06 C	CONTRACT FOR UWD RCRA DISPOSAL		30JUN03*	0	♦CONTRACT FOR UWD RCRA DISPOSAL
	>1% RCRA COMPOUNDS	12AUG03	28AUG03	\	>1% RCRA COMPOUNDS
S S S S S S S S S S S S S S S S S S S	COMPLETE DISP. OF RCRA MATL & SEALED SOURCES		28AUG03	0	COMPLETE DISP. OF RCRA MATI. & SEALED SOURCES
JUWPD FISS	FISSILE COMPOUNDS				
N S0000AWD6C	MATERIAL RECEIPT FISSILE COMPOUNDS	14MAR02	30MAY02	44	MATERIAL RECEIPT FISSILE COMPOUNDS
J9UWPDH8 F	FISSILE COMPOUNDS HAMMOCK	14MAR02	11AUG03	284*	FISSILE COMPOUNDS HAMMOCK
J9UWPD12R0 R	REJECTED >1% UO3	03JUN02	03JUN02	***	REJECTED >1% UO3
J9UWPD17R0 R	REJECTED >1% U3O8	04JUN02	010CT02	29	REJECTED >1% U3O8
J9UWPD20R0 R	REJECTED MISC. COMPOUNDS	02OCT02	310CT02	18	REJECTED MISC. COMPOUNDS
J9UWPD16R0 R	REJECTED >1% UF4	04NOV02	02DEC02	15	REJECTED >1% UF4
J9UWPD25A0 >	>1% ENRICHED COMPOUNDS	03DEC02	11AUG03	139	**************************************
S. A. A. Commission of the second control of the second of					
	Start Date Finish Date Data Date	01DEC00 BLCF - J901 31DEC05 01DEC00		NUCLEAR MATERIALS	Sheet 2 of 3 Early Bar Date
FLUOR FERNALD	Kun Dale		1.1.1.0	1.1.J.C URANIUM WASTE	WASTE R1-F08-002
© Primavera Systems, Inc.	stems, Inc.				

EVAS EVAX EVAX EVAX EVAX		◆COMPLETE DISPOSITION OF FISSILE COMPOUNDS	MFISSILE METAL PROCESSING/DECANTING	FISSILE METALS HAMMOCK	>1% ENRICHED METALS	MATERIAL RECEIPT FISSILE METALS	OFF-SITE PROCESSING OF FISSILE METALS	<1% ENRICHED METALS	REJECTED MISC. ENRICHED METALS	◆COMPLETE DISPOSITION OF FISSILE METALS	Date	Critical Activity (R1-F08-002)	
Orig EVA1 EVA2 EVA2		0	199 Team FIS	1,064*	229	273	815	45	25	0	NUCLEAR MATERIALS	1.1.J.C URANIUM WASTE	
Early Finish		11AUG03	27JUN02	30SEP05	02JUL03	18SEP03	30SEP05	17SEP03	30SEP03	30SEP03			
Early Start			02JUL01*	02JUL01	13MAY02*	13MAY02	01JUL02*	01JUL03*	18AUG03	QUANTA PARAMETER AND AND AND AND AND AND AND AND AND AND	01DEC00 BLCF - J901 31DEC05 01DEC00	7SEP01 11:01	
Activity Description	FISSILE COMPOUNDS	JOUWPE FISSILE METALS	FISSILE METAL PROCESSING/DECANTING	FISSILE METALS HAMMOCK	>1% ENRICHED METALS	MATERIAL RECEIPT FISSILE METALS	OFF-SITE PROCESSING OF FISSILE METALS	<1% ENRICHED METALS	REJECTED MISC. ENRICHED METALS	COMPLETE DISPOSITION OF FISSILE METALS	Start Date Finish Date Date Date	Run Date	stems, Inc.
Activity	SSIA DAWUL	JOUWPE FISSILE METALS	J9UWPE0030 F	ј јајумрена Е	J9UWPE25C0 >	J9UWPE0005 N	J9UWPE0060 C	J9UWPE25B0 <	J9UWPE15R0 R	J9UWPEMS07 C	\$	FLUOR FERNALD	© Primavera Systems, Inc.



SECTION 3 3.0 MANPOWER PLANS

MPS # 1JC01 FISSILE EXCEPTED <1% COMPOUNDS

DRIVERS	START DATE	END DATE	T0T	FY 2001 Q1 Q2 Q	FY 2001 Q1 Q2 Q3 Q4		FY 2002	FY 2002 Q1 Q2 Q3 Q4		FY 2003 Q1 Q2 Q3		8	FY 2004 Q1 Q2 Q	8 8	8	FY 2005 Q1 Q2 Q3		8	<u>م</u> 2	FY 2006 Q1 Q2 Q3	2	
801 Nuclear Materials Summary	10/02/2000	05/20/2002	×	XX XX	XXX XXX XXX XXX	X	XX XXX XXX	×														
802 Setup of Fac. & Repkg of Uranium Metals	tals 10/02/2000	07/18/2001	×	XX XX	XXX XXX XXX																	
803 Setup of Fac. & Repkg of < 1% Uranium	m 10/02/2000	08/30/2001	×	XX XX	XX XXX XXX XX	×																
804 Facilities Setup for Repkg > 1 WT% U235	235 10/02/2000	12/27/2001	×	XX XX	XXX XXX XXX	XX XX	×															
805 Shipment of Nuclear Materials		01/10/2002	×	XX XX	XXX XXX XXX	X	x xxx															
806 Nuc. Material Risk/PPE/SCA/Planning/Whse	/Whse 10/02/2000	05/20/2002	×	XX XX	XX XXX XXX XXX XXX XXX	X	XXX	×														
807 Small Scale Processing of Nuclear Material	terial 10/02/2000	01/30/2001	×	x xxx																		
808 UWD Depleted LLW & Depleted Ingots	10/02/2000	04/17/2002	×	XX XX	x xxx xxx xxx xxx xxx xxx	X	XXX	×														
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003	×	XX XX	X XXX XXX XXX XXX XXX XXX XXX XXX	X	XXX	XXX	×	×												
810 UWD Planning	10/02/2000	09/30/2003	×	XX XX	XXX XXX XXX XXX XXX XXX XXX XXX XXX XX	X	XXX	XXXX	XX	XX	XXX	ž										
811 PPE & SCA Support for UWD Activities	s 07/23/2001	10/16/2003			×	×	×	XXX XXX XXX XXX	-X	X	XXX XXX XXX	×			٠							
812 UWD RCRA Materials	02/04/2002	01/20/2004					\$	*** *** **		\ \ \ \ \	}	* *** *** *** ***	>									
813 Feas. Study Processing Uranium Waste		06/18/2003				-	•			*** *** *** ***	X	}	< <									
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005										2	X X	XX	XXX XXX XXX XXX XXX XXX XXX	XX XX	XXX	XX				
Reject normal co General Labor	Hazwat		9.00	•	0	v o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject normal co Transportation Labor	Motor Vehicle Operator		2.00	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject normal co Procurement	Material Property Control Rep.	Rep.	0.50	0	0	0.5	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	
Reject normal co Environmental Safety & H Rad Tech	Rad Tech		0.50		0	0.5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject normal co Operations	Operations Manager		0.50	0	0	0.5	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	
Reject depleted General Labor	Hazwat		4.00	0	0	-	0	•	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject depleted Transportation Labor	Motor Vehicle Operator		2.00	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject depleted Procurement	Material Property Control Rep.	Rep.	0.30		0	0.3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject depleted QA/QC	QA/QC Tech.		0.30		0	0.3	0	•	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject depleted Environmental Safety & H Rad Tech	Rad Tech		0.30		0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject depleted Operations	Operations Manager		0.40	0	0	4.0	0	0		0 0	0	0	0	0	0	0	0	0	0	0	0	
Depleted compo General Labor	Hazwat		2.00	0	0	7	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	
Depleted compo Transportation Labor	Motor Vehicle Operator		09.0	0	0	9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Depleted compo Transportation Labor	Heavy Equipment Operator	JO	0.20	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
Depleted compo Environmental Safety & H Rad Tech	Rad Tech		0.30	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
Depleted compo Operations	Operations Manager		0.20		0	0.2	0	0	. 0	0	0	0	0	0	0	0	0	0	0		0	
<=1% enriched c General Labor	Hazwat		5.00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0		0	
<=1% enriched c Transportation Labor	Motor Vehicle Operator		3.00	0	0	-	9	0	-	0	0	0	0	0	0	0	0	0	0	0	0	
<=1% enriched c Transportation Labor H	Heavy Equipment Operator	ō	1.00	0	0		-	0		0	0	0	0	0	0	0	0	0	0	0	0	

MPS # 1JC01 FISSILE EXCEPTED <1% COMPOUNDS

		,	٤	FY 2007	1	-	FY 2008	ı	Ĕ	FY 2009		FY 2010	010	ı	Ŧ	FY 2011	j	
URIVERS	START DATE	END DATE	5	Q1 Q2 Q3 Q4	8	ē	Q1 Q2 Q3 (2	9	Q1 Q2 Q3 Q4		Q1 Q2	ဗ	9	91	Q2 Q3	8	
801 Nuclear Materials Summary	10/02/2000	05/20/2002															l	l
802 Setup of Fac. & Repkg of Uranium Metals	Metals 10/02/2000	07/18/2001																
803 Setup of Fac. & Repkg of < 1% Uranium	10/02/2000	08/30/2001																
804 Facilities Setup for Repkg > 1 WT% U235	U235 10/02/2000	12/27/2001																
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002																
806 Nuc. Material Risk/PPE/SCA/Planning/Whs	ng/Whs 10/02/2000	05/20/2002																
807 Small Scale Processing of Nuclear Material	Material 10/02/2000	01/30/2001																
808 UWD Depleted LLW & Depleted Ingots	ots 10/02/2000	04/17/2002									-							
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003																
810 UWD Planning	10/02/2000	09/30/2003																
811 PPE & SCA Support for UWD Activities	ties 07/23/2001	10/16/2003																
812 UWD RCRA Materials	02/04/2002	01/20/2004																
813 Feas. Study Processing Uranium Waste		06/18/2003																
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005																
General Labor	Hazwat		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Procurement	Material Property Control Rep.	rol Rep.	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager		0	0	0	0	0	0	0	0		0	0	0	0	0	0	
General Labor	Hazwat		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Procurement N	Material Property Control Rep.	ol Rep.	0	0	0	0	0	0	0	0		0	0	0	0	0	0	
QAVQC	QA/QC Tech.		0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	
Environmental Safety & Health F	Rad Tech		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
General Labor	Hazwat		0	0	0	0	0	0	0	0	ò	0	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Heavy Equipment Operator	ator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
General Labor	Hazwat		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Heavy Equipment Operator	ator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

MPS # 1JC01 FISSILE EXCEPTED <1% COMPOUNDS

DRIVERS	START DATE END DATE	101	FY 2001 Q1 Q2 Q	Y 2001 Q2 Q3 Q4		FY 2002	FY 2002 Q1 Q2 Q3 Q4		FY 2003 Q1 Q2 Q3 Q4	8 8	4	₹ 6	FY 2004	8	2 اے	FY 2005	12 2		FY 2006	98	8	
<=1% enriched c Procurement	Material Property Control Rep.	0.50		0	-	0.5 0	0	-	0	0	۰	۰		0	١	٥	٥		0	°	٥	ı
<=1% enriched c QA/QC	QA/QC Tech.	0.50	0	0		0.5 0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	
<=1% enriched c Environmental Safety & H Rad Tech	1 Rad Tech	1.00	0	0	- 0	•		- 0	0	0	0	0	0	0	0	0	0	0	0	0	Ó	
<=1% enriched c Operations	Operations Manager	1.00	0	0	0	0	0	-	0	٥.	0	0	0	0	0	0	0	0	0	0	0	
Reject U3O8 General Labor	Hazwat	2.00	0	0	. ,	0 2	0	- 0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject U3O8 Transportation Labor	Motor Vehicle Operator	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject U3O8 Procurement	Material Property Control Rep.	0.20	0	0	0	0 0.2	0	0	0	0	0	0	0	0	0	0	0	0	0 0	•	0	
Reject U3O8 Transportation Labor	Heavy Equipment Operator	0.50	0	0		0 0.5	0	- 10	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject U308 Environmental Safety & H Rad Tech	1 Rad Tech	0.60	0	0	0	9:0 0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	
Reject U3O8 Operations	Operations Manager	0.50	0	0	0	0 0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject misc com General Labor	Hazwat	0.60	0	0	0	9.0 0.6	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject misc com Transportation Labor	Motor Vehicle Operator	0.20	0	0	0	0 0.2	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject misc com QA/QC	QA/QC Tech.	0.20	0	0	•	0 0.2	0	- 0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	
Reject misc com Environmental Safety & H Rad Tech	f Rad Tech	0.20	0	0	0	0 0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject misc com Operations	Operations Manager	0.20	0	0	0	0 0.2	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	
>1% fissile exce General Labor	Hazwat	0.20	0	0	0	0 0.2	0	. 0	0	0	0	0	0	•	0	0	0	0	0	0	0	
>1% fissile exce Transportation Labor	Motor Vehicle Operator	0.20	0	0	0	0 0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
>1% fissile exce Environmental Safety & H Rad Tech	1 Rad Tech	0.20	0	0	0	0 0.2	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	
>1% fissile exce Operations	Operations Manager	0.20	0	0		0 0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sheet Totals:	38.10 (0.00 00.00		9 10 12	0.00 19 10 12.00 7 00	0 00 0	00 0 00 0	00.0	00:00	000	00 0 00 0	8000	8	0.0	000	0 00 0	00 0 00 0	00:00	00.0	00.0	

MPS # 1JC01 FISSILE EXCEPTED <1% COMPOUNDS

		٤	FY 2007	7	·	Ł	FY 2008			FY 2009	60		Ĺ	FY 2010	0		Ŀ	FY 2011	_	
DRIVERS	START DATE END DATE	٥	62	Q1 Q2 Q3 Q4		9	Q1 Q2 Q3 Q4	9	ō	92	Q1 Q2 Q3 Q4	7	ā	Q1 Q2 Q3 Q4	33 0	4	8	Q1 Q2 Q3 Q4	8	7
Procurement	Material Property Control Rep.	0	٥	۰	ō	۰	0	0	0		٥	0	0	0	0	0	0	°	۰	۰
QA/QC	QA/QC Tech.	0	0	0	0	0	0	0		-	0	0	0	0	0	0	0	0	0	0
Environmental Safety & Health	Rad Tech	0	0	0	0	0	0	0		-	0	0	0	6	0	0	0	0	0	0
Operations	Operations Manager	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Labor	Hazwat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transportation Labor	Motor Vehicle Operator	0	0	0	0	0	0		_	•	0	0	0	0	0	0	0	0	0	0
Procurement	Material Property Control Rep.	0	0	•	0	0	0	0	_	0	0	0	0	0	0	0	0	0	0	0
Transportation Labor	Heavy Equipment Operator	0	0	0	0	0	0		_	0	0	0	0	0	0	0	0	0	0	0
Environmental Safety & Health	Rad Tech	0	0	0	0	0	0		0	•	0	0	0	0	0	0	0	0	0	0
Operations	Operations Manager	0	0	0	•	0	0		0	0	0	0	0	0	0	0	0	0	0	0
General Labor	Hazwat	•	0	0	0	0	0		-	0	0	0	0	0	0	0	0	0	0	0
Transportation Labor	Motor Vehicle Operator	•	0	•	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0
QA/QC	QA/QC Tech.	•	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0
Environmental Safety & Health	Rad Tech	0	•	•	ŏ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operations	Operations Manager	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0
General Labor	Hazwat	0	0	0	•	0	0	0	•	0	0	0	0	0	0	0	0	0	0	0
Transportation Labor	Motor Vehicle Operator	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
Environmental Safety & Health	Rad Tech	0	0	•	0	0	0	0	•	0	0	0	0	0	0	0	0	0	0	0
Operations	Operations Manager	0	•	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0.00 0.00

Sheet Totals:

MPS # 1JC02 FISSILE EXCEPTED & DEPLETED METALS

DRIVERS	START DATE	END DATE	101	FY 2001 Q1 Q2 Q3	FY 2001 1 Q2 Q3	8	9 ا	FY 2002 Q1 Q2 Q3	2	£ 9	FY 2003 Q1 Q2 Q3	3 04	₽ 2	8 8	03 04	Ισ	8 2	05 03 Q4	<u>" </u> 9	FY 2006	8 9	
801 Nuclear Materials Summary	10/02/2000	05/20/2002	×	XX XX	XX	XX	XXX	XX XXX XXX XXX XXX XXX														
802 Setup of Fac. & Repkg of Uranium Metals	als 10/02/2000	07/18/2001	×	X XXX XXX XXX	X	×																
803 Setup of Fac. & Repkg of < 1% Uranium	10/02/2000	08/30/2001	×	XX XXX XXX XX	X	×																
804 Facilities Setup for Repkg > 1 WT% U235	35 10/02/2000	12/27/2001	×	XXX XXX XXX XXX	X	XXX	XX															
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002	×	XXX XXX XXX XXX	×	XXX	XXX															
806 Nuc. Material Risk/PPE/SCA/Planning/Whse	Whse 10/02/2000	05/20/2002	×	XX XX	X	XX	XXX	XX XXX XXX XXX XXX XXX		_												
807 Small Scale Processing of Nuclear Material	erial 10/02/2000	01/30/2001	×	X XX																		
808 UWD Depleted LLW & Depleted Ingots	10/02/2000	04/17/2002	×	X XXX XXX XXX XXX XXX	X	XX	XXX	×××														
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003	×	XX XX	Š	XX	×××	X XXX XXX XXX XXX XXX XXX XXX XXX	XXX	XXX												
810 UWD Planning		09/30/2003	×	XXX XXX XXX	X	X	×××	XXX XXX XXX XXX XXX XXX XXX	XXX	XX	X	XXX										
811 PPE & SCA Support for UWD Activities	07/23/2001	10/16/2003				XX	XXX	X XXX XXX XXX XXX XXX XXX XXX XXX	XX	XXX	X	XXX	×									
812 UWD RCRA Materials	02/04/2002	01/20/2004						XX XXX XX	XXX	XX	X	X XXX XXX XXX XXX	XX	×								
813 Feas. Study Processing Uranium Waste		06/18/2003								XX	XXX XXX XXX	×		:								
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005											XX	XX	XX	×××	*** *** *** *** *** ***	XX XX	×			
Depleted Ingots General Labor H	Hazwat		1.50	0	0	0	0	0	0	0	0	0 1.5	0	0	0	0	0	0	0	0	0	0
Depleted Ingots Transportation Labor M	Motor Vehicle Operator		0.50	0	0	0	0	0	0	0	0	0 05	0	0	0	0	0	0	0	0	0	0
Depleted Ingots Procurement M	Material Property Control Rep.	Rep.	0.10	0	0	0	0	0	0	0	0	0 0.1	0	0	0	0	0	0	0	0	0	0
Depleted Ingots QA/QC	QA/QC Tech.		0.10	0	0	0	0	0	0	0	0	0 01	0	0	0	0	0	0	0	0	0	0
Depleted Ingots Environmental Safety & H Rad Tech	kad Tech		0.40	0		0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
Depleted Ingots Operations O	Operations Manager		0.20	0		0	0	0	0	0	0	0 0.2	0	0	0	0	0	0	0	0	0	0
Depleted Metal General Labor	Hazwat		54.00	0	•	60	9	9	9	9	9	9	0	0	0	0	0	0	0	0	0	0
Depleted Metal Transportation Labor M	Motor Vehicle Operator		18.00	0	.,	8	2	7	2	7	7	8	0	0	0	0 0	0	0	0	0	0	0
Depleted Metal Procurement M	Material Property Control Rep.	Rep.	4.50	0	0 0.5	0.5	9.0	0.5 0.5	5 0.5	9:0	0.5	0.5	0	0	0	0 0	0	0	0	0	0	0
Depleted Metal QA/QC Q	QA/QC Tech.		4.50	0	0 0.5	9:0	9.0	0.5 0.	5 0.5	9.0	9.0	0.5	0	0	0	0	0	0	0	0	0	0
Depleted Metal Environmental Safety & H Rad Tech	ad Tech		9.00	0		-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0
Depleted Metal Operations O	Operations Manager		9.00	0		-	-	-	_	-	-	-	0	0	0	0	0	0	0	0	0	0
Depleted Metal Craft Labor C	Carpenter		0.00	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enr metals fissile General Labor	Hazwat		1.50	0		0	0	0	0	0	0	0 15	0	0	0	0	0	0	0	0	0	0
Enr metals fissile Transportation Labor M	Motor Vehicle Operator		0.50	0		0	0	0	0	0	0	0 0.5	0	0	0	0	0	0	0	0	0	0
Enr metals fissile Procurement M	Material Property Control Rep.	Rep.	0.10	0		0	0	0	0	0	0	0 01	0	0	0	0	0	0	0	0	0	0
Enr metals fissile QA/QC	QA/QC Tech.		0.10	0	0	0	0	0	0	0	0	0 01	0	0	0	0 0	0	0	0	0	0	0
Enr metals fissile Environmental Safety & H Rad Tech	ad Tech		0.40	0	0	0	0	0	0	0	0	4.0 0.4	0	0	0	0	0	0	0	0	0	0
Enr metals fissile Operations O	Operations Manager		0.10	0	0	0	0	0	0	0	0	0 01	0	0	0	0 0	0	0	0	0	0	0

MPS # 1JC02 FISSILE EXCEPTED & DEPLETED METALS

DRIVERS	START DATE	END DATE	₽ 2	FY 2007	FY 2007 Q1 Q2 Q3 Q4	Ισ	FY 2008 Q1 Q2 Q3 Q4	3 04	9 5	FY 2009 Q1 Q2 Q3	2	٩ ٢	FY 2010 Q1 Q2 Q3 Q4	8	و اع	FY 2011 Q1 Q2 Q3	8	
801 Nuclear Materials Summary	10/02/2000	05/20/2002						-										ſ
802 Setup of Fac. & Repkg of Uranium Metals	Metals 10/02/2000	07/18/2001																
803 Setup of Fac. & Repkg of < 1% Uranium	anium 10/02/2000	08/30/2001																
804 Facilities Setup for Repkg > 1 WT% U235	% U235 10/02/2000	12/27/2001																
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002																
806 Nuc. Material Risk/PPE/SCA/Planning/Whs	ning/Whs 10/02/2000	05/20/2002																
807 Small Scale Processing of Nuclear Material	Material 10/02/2000	01/30/2001																
808 UWD Depleted LLW & Depleted Ingots	igots 10/02/2000	04/17/2002																
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003																
810 UWD Planning	10/02/2000	09/30/2003																
811 PPE & SCA Support for UWD Activities	vities 07/23/2001	10/16/2003																
812 UWD RCRA Materials	02/04/2002	01/20/2004																
813 Feas. Study Processing Uranium Waste	Vaste 10/01/2002	06/18/2003																
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005																
General Labor	Hazwat		0	0	0	N	0	0	0	٥	0	0	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator		0	•	0		0	0	0		0	0	0	0	0	0	0	
Procurement	Material Property Control Rep	ol Rep.	0	•	0		0	0	0	0	0	0	0	0	0	0	0	
QA/QC	QA/QC Tech.		0	•	0		0	0	0	0	•	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager		0	•	0		0	0	0	0	0	0	0	0	0	0	0	
General Labor	Hazwat		0	0	0		0	0	0			0	0	0	0	0 0	0	
Transportation Labor	Motor Vehicle Operator		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Procurement	Material Property Control Rep.	ol Rep.	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
QA/QC	QA/QC Tech.		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager		0	•	0		0	0	0	0	0	0	0	0	0	0	0	
Craft Labor	Carpenter		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
General Labor	Hazwat		0	0	0	0	0	0	0	0	0	٥	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator		0	0	•	0	0	0	0	0	0	0		0	0	0	0	
Procurement	Material Property Control Rep.	ol Rep.	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
QA/QC	QA/QC Tech.		0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech		0	0			0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager		0	0	0		0	0	0	0	0	0	0	0	0	0	0	

Page 207 of 295 09/06/2001 7:16:28 PM

Manpower Planning Sheet (CR2)

MPS # 1JC02 FISSILE EXCEPTED & DEPLETED METALS

DRIVERS	START DATE END DATE	ρ	<u>ه</u> و	FY 2001 Q1 Q2 Q3	9	و اع	FY 2002 Q1 Q2 Q3 Q4	9	و اع	FY 2003 Q1 Q2 Q3	9	9	FY 2004 01 02 03 04	0.00	- 5	FY 2005	FY 2005		FY 2006	900	8	
Reject Normal M General Labor	Hazwat	1.50	۰	۰	0	0	o	0	٥	۰	0 1.5	•	٥	1	°	°	٥			0	°	ı
Reject Normal M Transportation Labor	Motor Vehicle Operator	0.50	0	0	0	0	0	0	0	0	0 0.5	0	0	0		0	0		0	0	0	
Reject Normal M Procurement	Material Property Control Rep.	0.10	0	0	0	0	0	0	0	0	0 0.1	0	0	0		0	0	0		0	0	
Reject Normal M QA/QC	QA/QC Tech.	0.10	0	0	0	0	0	0	0	0	0 0.1	0	0		0	0	0		0	•	0	
Reject Normal M Environmental Safety & H Rad Tech	1 Rad Tech	0.40	0	0	0	0	0	0	0	0	4 :0 0	0	0	0	0	0	0	ö	0	0	0	
Reject Normal M Operations	Operations Manager	0.20	0	0	0	0	0	0	0	0	0 0.2	0	0	0	0	0	0	0	0	0	0	
Reject Normal M Craft Labor	Carpenter	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject misc depl General Labor	Hazwat	1.50	0	0		0	0	0	0	0	0 1.5	0	0	0		0	0		0	0	0	
Reject misc depl Transportation Labor	Motor Vehicle Operator	0.50	0	0	0	0	0	0	0	0	0 0.5	0	0	0	0	0	0	0	0	0	0	
Reject misc depl Procurement	Material Property Control Rep.	0.10	0	0	0	0	0	0	0	0	0 0.1	0	0	0	0	0	0		0	0	0	
Reject misc depl QA/QC	QA/QC Tech.	0.10	0	0	0	0	0	0	0	0	0 0.1	0	0		0	0	0		0	0	0	
Reject misc depl Environmental Safety & H Rad Tech	1 Rad Tech	0.30	0	0	0	0	0	0	0	0	0 03	0	0	0	0	0	0	0	0	0	0	
Reject misc depl Operations	Operations Manager	0.20	0	0		0	0	0	0	0	0 0.2	0	0	0	0	0	0	0	0	0	0	
shipping crew General Labor	Hazwat	24.00	0	0	0	7	7	2 2	4	4	4	0	0	0	0	0	0	0	0	0	0	
shipping crew Transportation Labor	Motor Vehicle Operator	12.00	0	0	0	-	-	-	7	2	2 2	0	0	0	0	0	0	Ö	0	0	0	
shipping crew QA/QC	QA/QC Tech.	4.50	•	0	0	9.9	0.5 0	0.5 0.5	9.0	0.5	.5 1	0	0	0	0	0	0	۰.	0	0	0	
shipping crew Environmental Safety & H Rad Tech	I Rad Tech	9.00	0		0	9.0	0.5.0	0.5 0.5	0.5	-	1 2	0	0	0	0	0	0	0	0	0	0	
shipping crew Operations	Operations Manager	9.00	0		0	0.5	0.5 0	5 0.5	9.0	-	0.5 1	0	0	0	0	0	0		0	0	0	
Loading crew Transportation Labor	Motor Vehicle Operator	12.00	0		0	-	-	-	7	7	2 2	0	0	0	0	0	0	0	0	0	0	
Loading crew Transportation Labor	Transportation Laborer	12.00	0	0	0	-	-	-	7	2	2 2	0	0	0	0	0	0	0	0	0	0	
Loading crew Procurement	Material Property Control Rep.	3.00	0	0		0	0	0.5 0.5	0.5	0.5 0	5.0.5	0	0	0		0	0	0	0	0	0	
Loading crew QA/QC	QA/QC Tech.	2.00	0	0	0	9.0	0.5 0.5	5 0.5	9.9	-	1.5	0	0	0		0	0	0	0	0	0	
Loading crew Environmental Safety & H Rad Tech	Rad Tech	2.00	0		0	0.5	0.5 0.5	5 0.5	9.0	-	5 1	0	0	0	0	0	0	Ö	0	0	0	
Loading crew Transportation Labor	Professional Warehouse Attendent	6.00	0		0	0.5	0.5 0.5	5 05	-	-	-	0	0	0	0	0	0	0	0	0	0	
Loading crew Operations	Operations Manager	6.00	0		0	9.0	0.5 0	0.5 0.5	-	-	-	0	0	0	0	0	0	0	0	0	0	
Plant 1 Pad crew General Labor	Hazwat	10.00	0		0	0	0	0 2	8	7	2 2	0	0	0	0	0	0	0	0	0	0	
Plant 1 Pad crew Transportation Labor	Motor Vehicle Operator	9.50	0		6	0	0	0 2	1.5	7	2 2	0	0	0	0	0	0	0	0	0	0	
Plant 1 Pad crew Procurement	Material Property Control Rep.	2.50	0		0	0	0	0 0.5	9 0	0 5 0	5 0.5	0	0	0	0	0	0	0	0	0	0	
Plant 1 Pad crew Environmental Safety & H Rad Tech	Rad Tech	9.00	0		0	0	0	•	-	-	-	0	0	0	0	0	0	0	0	0	0	
Plant 1 Pad crew Operations	Operations Manager	0.50	0		0	0	0	50 0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	
Plant 1 Pad crew Environmental Safety & H Industrial Hygienist Tech.	Industrial Hygienist Tech.	2.50	0	0	-	0	0	90 0	0.5	0 5 0	0.5 0.5	0	0	0	•	0	0	0	0	0	0	

MPS # 1JC02 FISSILE EXCEPTED & DEPLETED METALS

	I ISSIEE EAGET I EU & DETEET EU METAL	4L3 EV 2007		2000	ŝ		2000	9		ί	,			í	į			
DRIVERS	START DATE END DATE	Q1 Q2 Q3 Q4	24	01 02	2 03 04		01 02	03 04	4	01 02	1 02 0	03 04	1	9	Q1 Q2 Q3	3 04	1	
General Labor	Hazwat	0 0	0	0	0 0	0	0	0	0	0	٥	0	0	٥	۰	0	0	
Transportation Labor	Motor Vehicle Operator	0	0	0	0			0	0	0	0	0	0	0	0	0	0	
Procurement	Material Property Control Rep.	0	•	0	0	0	0	0	0	0	٥	ò	0	0	0	0	0	
QA/QC	QA/QC Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Craft Labor	Carpenter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
General Labor	Hazwat	0	0	0	0 0			0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Procurement	Material Property Control Rep.	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	
avac	QA/QC Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
General Labor	Hazwat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
QA/QC	QA/QC Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Transportation Laborer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Procurement	Material Property Control Rep.	0	0	0	0	0	0	0	Ö	0	0	0	0	0	0	0	0	
QA/QC	QA/QC Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Professional Warehouse Attendent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
General Labor	Hazwat	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator	0	0	•	0		0	0	0	0	0	0	0	0	0	0	0	
Procurement	Material Property Control Rep.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health	Industrial Hygienist Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

MPS # 1JC02 FISSILE EXCEPTED & DEPLETED METALS

						2001		"	FY 2002	2	1	F	FY 2003		•	₹ 200	4		Ŧ	FY 2005	Į,		Ŧ	FY 2006		
DRIVERS	SS	START DATE	END DATE	T0T	9	Q1 Q2 Q3 Q4	9	٥	05	Q1 Q2 Q3 Q4		01 Q	Q1 Q2 Q3 Q4	9	٥	6	21 02 03 04	4	٥	05 Q	Q1 Q2 Q3 Q4		9	Q1 Q2 Q3 Q4	9	
Decant crew	General Labor	Hazwat		7.50	0	0 1.5	5 1.5	1.5	1.5	1.5	0	۰			°	0	٥	0	۰	•	۰	٥	۰	٥	٥	
Decant crew	Transportation Labor	Motor Vehicle Operator		2.50	0	0 0.5	5 0.5	0.5	0.5	9.0	-	0	0	0	0	0	0	0	0	0	0	0	0	0		
Decant crew	Environmental Safety & H Rad Tech	H Rad Tech		2.50	•	0 0.5	5.0.5	0.5	0.5	9.5		0	0	0	0	0	0	0	0	ė	0	0	0	0	0	•
Decant crew	Operations	Operations Manager		2.50	0	0 0.5	5 0.5	0.5	9.5	9.0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0	0	•
Decant crew	Environmental Safety &	Environmental Safety & H Industrial Hygienist Tech.		2.50	0	0 0.5	5 0.5		0.5 0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
											-									Ì						

Sheet Totals:

MPS # 1JC02 FISSILE EXCEPTED & DEPLETED METALS

			FY 2007			FY 2008	8		-	FY 2009	6	ļ	Œ	, 2010	_		Œ	FY 2011	_
DRIVERS	START DATE END DATE	٥	20	21 02 03 04		a1 a2 a3 a4	93	9	9	Q1 Q2 Q3 Q4	Q3 Q	4	٥	21 02 03 04	o E	ı	۶	Q1 Q2 Q3 Q4	ğ
General Labor	Hazwat	0	0	0		0		l°	ľ	0	0	٥	0	۰	٥	۰	۰	0	٥
Transportation Labor	Motor Vehicle Operator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Environmental Safety & Health	Rad Tech	0	0	0	0	0	0	0 0.	0	0	0	0	0	0	0	0	0	0	0
Operations	Operations Manager	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Environmental Safety & Health	Industrial Hygienist Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MPS # 1JC03 RCRA MATERIAL & SEALED SOURCES

o day y d d		!		Œ	FY 2001	1	FY 2002	005	·	FY 2003		1	FY 2004	904	1	FY 2005	90	1	FY 2006	900	ı
SHARIS	SIAKIDALE	END DAIE	5	5	Q1 Q2 Q3 Q4	4	o o	Q1 Q2 Q3 Q4	Z	9	02 03	8	01 02	03 04		9	ဗ	9	Q1 Q2 Q3	83	Q 4
801 Nuclear Materials Summary	10/02/2000	05/20/2002	^	XX XX	XXX XXX XXX XXX	XXX	XX XXX XXX	×	_												
802 Setup of Fac. & Repkg of Uranium Metals	Metals 10/02/2000	07/18/2001	^	XX XX	x xxx xxx xxx																
803 Setup of Fac. & Repkg of < 1% Uranium	anium 10/02/2000	08/30/2001	^	XXXX	XX XXX XXX XXX	 															
804 Facilities Setup for Repkg > 1 WT% U235	% U235 10/02/2000	12/27/2001	^	XX XX	XXX XXX XXX XXX	X	×														
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002	^	XXXX	XXX XXX XXX XXX	×	×														
806 Nuc. Material Risk/PPE/SCA/Planning/Whse	ning/Whse 10/02/2000	05/20/2002	^	XX XX	XX XXX XXX XXX XXX XXX	XX	XX XX	X													
807 Small Scale Processing of Nuclear Material	r Material 10/02/2000	01/30/2001	^	X XX																	
808 UWD Depleted LLW & Depleted Ingots	10/02/2000	04/17/2002	^	XX XX	X XXX XXX XXX XXX XXX	XX	XX	×													
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003	^	XX XX	* *** *** *** *** *** *** *** ***	-XXX	XX	XXX	X	×											
810 UWD Planning	10/02/2000	09/30/2003	^	XX XX	*** *** *** *** *** *** *** *** *** ***	×	X	XXX	×	XX	XXX X	X									
811 PPE & SCA Support for UWD Activities	vities 07/23/2001	10/16/2003			^	X	X	XXX XXX XXX XXX	X	XX	X XXX XXX XXX XXX	×									
812 UWD RCRA Materials	02/04/2002	01/20/2004				<u> </u>	5	3	3				;								
813 Feas. Study Processing Uranium Waste		06/18/2003					₹	*** *** **		*** *** *** ***	XXX XXX XXX XXX XXX X XXX XXX XXX	X	×								
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005										×	XX X	XXX XXX XXX XXX XXX XXX XXX	XX	XXX X	XXX	×			
<=1% RCRA Co General Labor	Hazwat		9.00	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=1% RCRA Co Transportation Labor	Motor Vehicle Operator		2.50	0	0	•	1. 1.5	0	- 0	0	0	0	0	0	ò	0	0	0	0	0	0
<=1% RCRA Co Procurement	Material Property Control Rep.	d Rep.	0.10	0	0	0	0 0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=1% RCRA Co Environmental Safety & H Rad Tech	H Rad Tech		0.00	0	0		0	0	-	0	0	. 0	0	0	0	0	0	0	0	0	0
<=1% RCRA Co Operations	Operations Manager		2.00	0	0		-	0	~ 0	0	0	0	0	0		0	0	0		0	0
<=1% RCRA Co Environmental	Environmental Scientist Tech.	Tech.	0.60	0	0	-	0.3 0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>1% RCRA Com General Labor	Hazwat		1.50	0	0		0	0	- 0	0	0	5.1	0	0		0	0	0	0	0	0
>1% RCRA Com Transportation Labor	Motor Vehicle Operator		0.50	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0
>1% RCRA Com Procurement	Material Property Control Rep.	l Rep.	0.50	0	0	0	0	0	0	0	0	9.0	0	0	0	0	0	0	0	0	0
>1% RCRA Com QA/QC	QA/QC Tech.		0.50	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0 0	0	0
>1% RCRA Com Environmental Safety & H Rad Tech	H Rad Tech		0.50	0	0	0	0	0	- 0	0	0	0.5	0	0	0	0	0	0	0	0	0
>1% RCRA Com Operations	Operations Manager		0.50	0	0	0	0	0	0	0	0	9.0	0	0	0	0	0	0	0	0	0
T-Hoppers General Labor	Hazwat		10.50	0	0	-	0	0		3.5	0	0	0	0	0	0	0	0	0	0	0
T-Hoppers Transportation Labor	Motor Vehicle Operator		2.30	0	0	0	0	0	- 5	8:0	0	0	0	0	0	0	0	0	0	0	0
T-Hoppers Procurement	Material Property Control Rep.	l Rep.	0.80	0	0	0	0	0	0.5	0.3	0	0	0	0	0	0	0	0	0	0	0
T-Hoppers QA/QC	QA/QC Tech.		0.80	0	0		0	0	- 50	0.3	0	0	0 0	0	0	0	0	0	0	0	0
T-Hoppers Environmental Safety & H Rad Tech	H Rad Tech		1.50	0	0	0	0	0	_	0.5	0	0	0	0	0	0	0	0	0	0	0
T-Hoppers Operations	Operations Manager		0.80	0	0	-	0	0	0 2	0.3	0	0	0	0	0	0	0	0	0	0	0
sources General Labor	Hazwat	•	24.50	0	0	. 1	0	0		7	_	3.5	0	0	0	0	0	0	0	0	0

MPS # 1JC03 RCRA MATERIAL & SEALED SOURCES

DRIVERS	START DATE	END DATE	919	FY 2007 Q1 Q2 Q3 Q4		FY 2008 Q1 Q2 Q3	8 23 Q4	FY 2009 Q1 Q2 Q3	009 Q3 Q4	- 6	FY 2010 Q1 Q2 Q3 Q4	8	9	FY 2011 Q1 Q2 Q3	8	
801 Nuclear Materials Summary	10/02/2000	05/20/2002			-											ı
802 Setup of Fac. & Repkg of Uranium Metals	letals 10/02/2000	07/18/2001														
803 Setup of Fac. & Repkg of < 1% Uranium	iium 10/02/2000	08/30/2001														
804 Facilities Setup for Repkg > 1 WT% U235	U235 10/02/2000	12/27/2001														
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002														
806 Nuc. Material Risk/PPE/SCA/Planning/Whs	10/02/2000 1g/Whs	05/20/2002														
807 Small Scale Processing of Nuclear Material	Material 10/02/2000	01/30/2001														
808 UWD Depleted LLW & Depleted Ingots	ots 10/02/2000	04/17/2002														
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003														
810 UWD Planning	10/02/2000	09/30/2003														
811 PPE & SCA Support for UWD Activities	lies 07/23/2001	10/16/2003														
812 UWD RCRA Materials	02/04/2002	01/20/2004														
813 Feas. Study Processing Uranium Waste	aste 10/01/2002	06/18/2003														
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005														
General Labor	Hazwat		0	0	ö-	0	0	0	0	0	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator	_	0	0		0	0	0	0	0	0	0	0	0	0	
Procurement P	Material Property Control Rep.	Irol Rep.	0	0	0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech		0	0 0	0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager		o	0	0	0	0	0	0	0	0	0 0	0	0	0	
Environmental	Environmental Scientist Tech.	st Tech.	0	0	 O	0	0	0	0	0	0	0 0	0	0	0	
General Labor	Hazwat		0	0	0	0	0	0	0	0	0	0 0	0	0 0	0	
Transportation Labor	Motor Vehicle Operator	<u>_</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	
Procurement	Material Property Control Rep	ırol Rep.	0	0	0	0	0	0	0	0	0	0 0	0	0	0	
avac	QA/QC Tech.		0	0	0	0	0	0	0	0 0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech		0	0	0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager		0	0	0	0	0	0	0	0	0	0 0	0	0	0	
General Labor	Hazwat		0	0	0	0	0	0	0	0	0	0 0	0	0	0	
Transportation Labor	Motor Vehicle Operator	_	0	0	0	0	0	0	0	0	0	0 0	0	0 0	0	
Procurement	Material Property Control Rep	rol Rep.	0	0	0	0	0	0	0	0	0	0	0	0 0	0	
aAac	QA/QC Tech.		0	0	0	0	0	0	0	0	0	0	0	0	0	
Environmental Safety & Health	Rad Tech		0	0	0	0	0	0	0	0	0	0	0	0 0	0	
Operations	Operations Manager		0	0	0	0	0	0	0 0	0	0	0	0	0	0	
General Labor	Hazwat		0	0	0	0	0	0	0	0	0	0	0	0	0	

MPS # 1JC03 RCRA MATERIAL & SEALED SOURCES

				٤	200			FY 20	05	ı	٦	, 200;	_		FY 2	004		Ĺ	FY 2005	10		Ŧ	FY 2006		
DRIVERS	SS	START DATE END DATE	TOT	٩	02 0	Q1 Q2 Q3 Q4	-	1 02	Q1 Q2 Q3 Q4	4	٥	Q2 C	Q1 Q2 Q3 Q4	•	21.0	21 92 93 94	2	5	05	Q1 Q2 Q3 Q4		9	0	Q1 Q2 Q3 Q4	
sonrces	Transportation Labor	Motor Vehicle Operator	5.20	0	0		-	°	0	0	0 1.5 1.5 1.5	1.5	1.5	7:0	0	0	٥	٥	۰	0	٥	۰	٥	٥	
sonrces	Procurement	Material Property Control Rep.	1.70	0	0	0	-	0	0	0	9.0	9.5	9.0	0.2	0	0	0	0	0	0	0	0	0	0	
sontoes	QA/QC .	QA/QC Tech.	1.70	0	0	0	- 0	0	0	•	9.0	0.5	9.0	0.2	0	0	0	0	0	0		ö	0		
sontces	Environmental Safety & H Rad Tech	H Rad Tech	3.50	0	0	0	-	0	0	0	-	-	-	0.5	0	0	0	0	0	0	0	0	0	0	0
sonrces	Operations	Operations Manager	1.70	0	0	0	- _o .	0	0	0	9.0	9.0	9.0	0.2	0	0	0	0	0	0	0	0	0	0	

69.20 Sheet Totals:

MPS # 1JC03 RCRA MATERIAL & SEALED SOURCES

		싵	2007		1	FY 200		'	F	600		_	FY 2010	9		Ĺ	FY 2011	_
DRIVERS	START DATE END DATE	٥	Q1 Q2 Q3 Q4	8	à	11 Q2 Q3 Q4	33 0		01 0	Q1 Q2 Q3 Q4	9	ð	21 02 03 04	03 0	4	&	Q1 Q2 Q3 Q4	S Q
Transportation Labor	Motor Vehicle Operator	0	0			0 0	•	0	0	0	,	Î	0	٥	٥	٥	٥	۰
Procurement	Material Property Control Rep.	0	0	0		0	0	0	0	0	0	-	0	0	0	0	0	0
QA/QC	QA/QC Tech.	0	0	0	-	0	0	0	0	0	Ċ	0	0	0	0	0	0	0
Environmental Safety & Health	Rad Tech	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
Operations	Operations Manager	0	0	0		0	0	0	0	0	0	٥	0	0	0	0	0	0

0.00 0.00

Sheet Totals:

MPS # 1JC04 FISSILE COMPOUNDS

DRIVERS	START DATE	END DATE	TOT	F	FY 2001 Q1 Q2 Q3 Q4	9	٩	FY 2002 Q1 Q2 Q3	9	_ 8	FY 2003 Q1 Q2 Q3	3 23 Q4		FY 2004 Q1 Q2 Q3	03 04		FY 2005 Q1 Q2 Q3	2 03	8	# 2	FY 2006 Q1 Q2 Q3	9 2	
801 Nuclear Materials Summary	10/02/2000	05/20/2002	Î	XXX XXX XXX XXX	XX X	XXX	XXX	XX XXX XXX		_													
802 Setup of Fac. & Repkg of Uranium Metals	tals 10/02/2000	07/18/2001	^	X XXX XXX XXX	XX	×																	
803 Setup of Fac. & Repkg of < 1% Uranium	ım 10/02/2000	08/30/2001	^	XX XXX XXX XX	XX	X																	
804 Facilities Setup for Repkg > 1 WT% U235	235 10/02/2000	12/27/2001	^	XXX XXX XXX	X X	XX	XX																
805 Shipment of Nuclear Materials		01/10/2002	^	X XX	XX	XXX	XXX XXX XXX XXX																
806 Nuc. Material Risk/PPE/SCA/Planning/Whse	/Whse 10/02/2000	05/20/2002	^	XXX XXX XXX	X X	XXX	xx xxx xxx	XX XX		-													
807 Small Scale Processing of Nuclear Material	Iterial 10/02/2000	01/30/2001	^	X XX																			
808 UWD Depleted LLW & Depleted Ingots	s 10/02/2000	04/17/2002	^	XXX	XXX	XXX	X XXX XXX XXX XXX XXX	××															
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003	^	XX	XX	XXX	XXX	X XXX XXX XXX XXX XXX XXX XXX XXX	×	X	×												
810 UWD Planning	10/02/2000	09/30/2003	^	XX	XX	XXX	XXX	XXX XXX XXX XXX XXX XXX XXX XXX XXX XX	XX	XX	×××	X X	×										
811 PPE & SCA Support for UWD Activities	s 07/23/2001	10/16/2003				XXX	XXX	X XXX XXX XXX XXX XXX XXX XXX XXX	×	XX	XXX	X	×										
812 UWD RCRA Materials	02/04/2002	01/20/2004						XX XXX XX	×	XX	×××	×	x xxx xxx xxx xxx xxx	×									
813 Feas. Study Processing Uranium Waste	te 10/01/2002	06/18/2003									XXX XXX XXX	×		:									
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005											X	XXX	XXX XXX XXX XXX XXX XXX XXX	X	XX	XX	XX				
Reject >1% U3O General Labor	Hazwat		3.00	0	0	0	0	0	0 15	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
Reject >1% U3O Transportation Labor	Motor Vehicle Operator		1.00	0	0	0	0	0	0 05	9:0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reject >1% U3O Transportation Labor	Heavy Equipment Operator	ō	9.	0		0	0	0	0 0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	
Reject >1% U3O Environmental Safety & H Industrial Hygienist Tech.	Industrial Hygienist Tech.		1.00	0	0	0	0	0	0 0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
Reject >1% U3O Environmental Safety & H Rad Tech	Rad Tech		9.1	0			0	0	0 05	0.5	0	0		0	0	0	0	0	0	0	0	0	
Reject >1% U3O Operations	Operations Manager		1.00	0	0	0	0	0	0 05	0.5	0	0	0	0	0		0	0	0	0	0	0	0
Reject misc com General Labor	Hazwat		1.50	0		0	0	0	08 07		0	0	0	0	0	0	0	0	0	0	0	0	
Reject misc com Transportation Labor	Motor Vehicle Operator		0.50	0		0	0	0	0.3 0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject misc com Transportation Labor	Heavy Equipment Operator	or	0.50	0		0	0	0	0.3 0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reject misc com Environmental Safety & H Industrial Hygienist Tech.	Industrial Hygienist Tech.		0.50	0	0	0	0	0	0.3 0.2		0	0	0	0	0	0	0	0	0	0	0	0	
Reject misc com Environmental Safety & H Rad Tech	Rad Tech		0.50	0	0	0	0	0	0 0.5		0	0	0	0	0	0	0	0	0	0	0	0	
Reject misc com Operations	Operations Manager		0.50	0		0	0	0	0 05	0	0	0	0	0	0	0	0	0	0	0	0	0	۰
>1 enriched com General Labor	Hazwat		7.50	0	0	0	0	0	0	1 5	2.5	2 5	-	0	0	0	0	0	0	0	0	0	
>1 enriched com Transportation Labor	Motor Vehicle Operator		2.50	0	0		0	0	0	0.3	8.0	60	9.0	0	0	0		0	0	0	0	0	•
>1 enriched com Transportation Labor	Heavy Equipment Operator	JO	2.50	0	0	0	0	0	0	•	-	-	S.	0	0	0	0	0	o	0	0		
>1 enriched com Environmental Safety & H Industrial Hygienist Tech.	Industrial Hygienist Tech.		2.50	0	0	0	0	0	0 0	0	-	-	0.5	0	0	0	0	0	0	0	0		
>1 enriched com Environmental Safety & H Rad Tech	Rad Tech		2.70	0	0	0	0	0	0	0 3	-	60	0.5	0	0	0	0	0	0	0	0		_
>1 enriched co Transportation Labor	Heavy Equipment Operator	ō	0.00	0		0	0	0	0	•	0	0		0	0	0	0	0	0	0	0		
>1 enriched com Operations	Operations Manager		2.30	0			0	0	0	0	60	0 7 0	0.7	0	0	0	0	0	0	0	0	0	_

MPS # 1JC04 FISSILE COMPOUNDS

START DATE	END DATE	٩	2007 02 Q3	2		2008 22 Q3 Q4		FY 200	3 94	<u>_</u> 2	02 Q3	8	<u>_</u> 2			
10/02/2000	05/20/2002															ı
10/02/2000	07/18/2001															
10/02/2000	08/30/2001															
804 Facilities Setup for Repkg > 1 WT% U235 10/02/2000	12/27/2001															
10/02/2000	01/10/2002															
806 Nuc. Material Risk/PPE/SCA/Planning/Whs 10/02/2000	05/20/2002															
807 Small Scale Processing of Nuclear Material 10/02/2000	01/30/2001															
10/02/2000	04/17/2002															
10/02/2000	01/06/2003															
10/02/2000	09/30/2003															
07/23/2001	10/16/2003															
02/04/2002	01/20/2004															
10/01/2002	06/18/2003															
10/02/2003	09/29/2005															
Hazwat		0	0	o	0	0	0	0	0	0	0	0	0	0	0	
Motor Vehicle Operator		0	0	ö	0	0	0	0	0	0	0	0	0	0	0	
Equipment Opera	tor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ial Hygienist Tech		0	0		0	0	0	0	0	0	0	0	0	0	0	
Rad Tech		•	0		0	0	0	0	0	0	0	0	0	0	0	
ions Manager		•	0		0	0	. ,	0	0	0	0	0	0			
		o	c		c	6		•		•			, ,		•	
(,	•		•	•	-	•	-	>	5	o .	0	0	0	
/ehicle Operator		0	0	0	•	0	0	0	0	0	0	0	0	0	0	
Equipment Opera	tor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Industrial Hygienist Tech		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rad Tech		0	0	0	0	0		0	0	0	0	0	0	0	0	
Operations Manager		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hazwat		0	•	0	ó	0	0	0	0	0	0	0	0	0	0	
Motor Vehicle Operator		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Equipment Operal	lor	0	0	0	•	0		0	0	0	0	0	0	0	0	
Industrial Hygienist Tech.		0	0	õ	0	0	0	0	0	0	0	0	0	0	0	
Rad Tech		0		•	0	0	0	0	0	0	0	0	0	0	0	
Equipment Opera	lor	0	0	0	0	0		0	0	0	0	0	0	0	0	
Operations Manager		0	0		0	0	0	0	0	0	. 0	0	0	0	0	
Metals 6 U235 6 U235 Ing/Whs Material gots Motor Ve Heavy E Industria Motor Ve Heavy E Industria Motor Ve Heavy E Industria Industria Motor Ve Heavy E Industria Industria Rad Tec Operatio	10/02/2000 Metals 10/02/2000 6 U235 10/02/2000 ing/Whs 10/02/2000 ing/Whs 10/02/2000 gots 10/02/2000 ing/Whs 10/02/2000	10/02/2000 05/20/2002 10/02/2000 05/20/2002 10/02/2000 07/18/2001 10/02/2000 08/30/2001 10/02/2000 08/30/2001 10/02/2000 01/10/2002 10/02/2000 01/10/2002 10/02/2000 01/30/2001 10/02/2000 01/30/2001 10/02/2000 01/30/2001 10/02/2000 01/30/2003 07/23/2001 10/16/2003 07/23/2001 10/16/2003 07/23/2001 10/16/2003 07/23/2001 10/16/2003 07/23/2001 10/16/2003 07/23/2001 10/16/2003 07/23/2001 10/16/2003 07/23/2001 10/16/2003 10/02/2003 09/29/2005 10/02/2003 09/29/2005 11/002/2003 09/29/2003 11/002/2003 09/29/20	10/02/2000 05/20/2002 10/02/2000 05/20/2002 10/02/2000 07/18/2001 10/02/2000 08/30/2001 10/02/2000 08/30/2001 10/02/2000 01/10/2002 10/02/2000 01/10/2002 10/02/2000 01/30/2001 10/02/2000 01/30/2001 10/02/2000 01/30/2001 10/02/2000 01/30/2003 07/23/2001 10/16/2003 07/23/2001 10/16/2003 07/23/2001 10/16/2003 07/23/2001 10/16/2003 07/23/2001 10/16/2003 10/02/2003 09/29/2005 10/02/2003 09/29/2005 10/02/2003 09/29/2005 10/02/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2005 11/002/2003 09/29/2003 10/002/2003 09/29/2005 11/002/2003 09/29/2003 10/002/2003 09/29/2003 10/002/2003 09/29/2005 11/002/2003 09/29/2003 10/002/2003 09/29/2	1002/2000 05/20/2002 100/02/2000 05/20/2002 100/02/2000 05/20/2001 100/02/2000 07/18/2001 100/02/2000 12/27/2001 100/02/2000 12/27/2001 100/02/2000 12/27/2001 100/02/2000 01/10/2002 100/02/2000 01/10/2002 100/02/2000 01/30/2001 100/02/2000 01/30/2001 100/02/2000 01/30/2001 100/02/2000 01/30/2001 100/02/2000 01/20/2004 100/02/2000 01/20/2004 100/02/2000 01/20/2004 100/02/2000 01/20/2004 100/02/2002 01/20/2004 100/02/2003 09/29/2005 01/20/2004 100/02/2003 09/29/2005 01/20/2004 100/02/2003 09/29/2005 01/20/2004	START DATE END DATE Q1 Q2 Q3 Q4	START DATE END DATE Q1 Q2 Q3 Q4	START DATE FY 2007 FY 2007 FY 2007 FY 2007 FY 2008 FY 2008	START DATE FY 2007 FY 2007 FY 2007 FY 2007 FY 2008 Cyr 02 03 04 Cyr 04 04 Cyr 04 04 Cyr 04 04 Cyr 04 04 Cyr 04 04 <td> FY 2007 FY 2007 FY 2007 FY 2008 FY 2008 FY 2008 FY 2008 FY 2008 FY 2009 FY</td> <td> PY 2007 PY 2008 PY 2</td> <td> FY 2001 FY 2002 FY 2003 FY 2</td> <td> FY 2004 FY 2</td> <td> Pri 2007 Pri 2008 Pri 2008</td> <td> FY 2007 FY 2017 FY 2</td> <td> FY 2004 FY 2005 FY 2</td>	FY 2007 FY 2007 FY 2007 FY 2008 FY 2008 FY 2008 FY 2008 FY 2008 FY 2009 FY	PY 2007 PY 2008 PY 2	FY 2001 FY 2002 FY 2003 FY 2	FY 2004 FY 2	Pri 2007 Pri 2008 FY 2007 FY 2017 FY 2	FY 2004 FY 2005 FY 2		

MPS # 1JC04 FISSILE COMPOUNDS

					Ĕ	FY 2001		٦	FY 2002	2	- 1	FY 2003	03	ا	Ŧ	FY 2004			FY 2005	905		ш	FY 2006	9	
DRIVERS	SS	START DATE	END DATE	ē	9	2 0	Q1 Q2 Q3 Q4	٥	05	Q1 Q2 Q3 Q4		Q1 Q2 Q3 Q4	3	7	٥	Q1 Q2 Q3 Q4	3 Q4	σ	1 02	Q1 Q2 Q3 Q4	8	8	Q1 Q2 Q3 Q4	20	۱ 🕶
Reject UO3	General Labor	Hazwat		0.00	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	°	٥	٥	٥	۰	o
Reject UO3	Transportation Labor	Motor Vehicle Operator		0.00	•	0	0	•	0	0	-	0	•	ò	0	0	0	0	0	0	0	0	0	0	0
Reject U03	Procurement	Material Property Control Rep	Зер	0.00	0	0	0		0	0		0	0	0	0	0	0	0	0	0	Ó	0	0	0	0
Reject UO3	QA/QC	QA/QC Tech.		0.00	0	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0
Reject U03	Environmental Safety & H Rad Tech	1 Rad Tech		0.00	0	0	0		0	0	- 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reject U03	Operations	Operations Manager		0.00	0	0	0	0	0	0	-0	0	•	o .	0	0	0	0	0	0	0	0	0	0	0
Reject UF4	General Labor	Hazwat		0.00	0	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reject UF4	Transportation Labor	Motor Vehicle Operator		0.00	0	0	0		0	0	- 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reject UF4	Procurement	Material Property Control Rep.	Gep.	0.00	0	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reject UF4	QA/QC	QA/QC Tech.		0.00	0	0	0	•	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reject UF4	Environmental Safety & H Rad Tech	1 Rad Tech	÷	0.00	0	0	0	•	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reject UF4	Operations	Operations Manager		0.00	0	0	0	•	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sheet Totals:

MPS # 1JC04 FISSILE COMPOUNDS

		٦	FY 2007			FY 2008	800		-	FY 2009	6		Ŧ	FY 2010	_		Ē	FY 2011		
DRIVERS	START DATE END DATE	9	6	Q1 Q2 Q3 Q4		200	Q1 Q2 Q3 Q4	9	٥	7	Q1 Q2 Q3 Q4		9	Q1 Q2 Q3 Q4	3 04		٥	Q1 Q2 Q3 Q4	9	
General Labor	Hazwat	0	0	0		0	0	0	0	٥	0	0	0	0	0	0	۰	٥	۰	۰
Transportation Labor	Motor Vehicle Operator	0	0	0		0	0	-	•	0	0	0	0	0	0	0	0	0	0	0
Procurement	Material Property Control Rep.	0	0	0	0		0			0	0	0	0	0	0	0	0	0	0	0
QA/QC	QA/QC Tech.	0	0	•			0	0		0	0	0	0	0	0	0	0	0	0	0
Environmental Safety & Health	Rad Tech	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	۰	0	0	0
Operations	Operations Manager	0	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Labor	Hazwat	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
Transportation Labor	Motor Vehicle Operator	0	0	0	o	0	0	0		0	0	0	0	0	0	0	0	0	0	0
Procurement	Material Property Control Rep.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
QA/QC	QA/QC Tech.	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Environmental Safety & Health	Rad Tech	0	0	0	0	0	0	0	0	0	0	0	0	0	0	· •	0	0	0	0
Operations	Operations Manager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MPS # 1JC05 FISSILE METALS

DRIVERS	START DATE	END DATE	T0T	9	FY 2001 Q1 Q2 Q3 Q4	8	6	FY 2002 Q1 Q2 Q3	8	٩	FY 2003 Q1 Q2 Q3	3 04	I a	FY 2004 Q1 Q2 Q3	93 94		FY 2005 Q1 Q2 Q3		8	٩	FY 2006 Q1 Q2 Q3	9	
801 Nuclear Materials Summary	10/02/2000	05/20/2002		XXX XXX XXX XXX	XX	XXX	XXX	xx xxx xxx											-				
802 Setup of Fac. & Repkg of Uranium Metals	tals 10/02/2000	07/18/2001		X XXX XXX XXX	XX																		
803 Setup of Fac. & Repkg of < 1% Uranium	m 10/02/2000	08/30/2001	^	XX XXX XXX XX	×	X				_													
804 Facilities Setup for Repkg > 1 WT% U235	235 10/02/2000	12/27/2001		XXX XXX XXX XXX	XX	XXX	XX																
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002		XXX XXX XXX XXX	XXX	XXX	XXX																
806 Nuc. Material Risk/PPE/SCA/Planning/Whse	Whse 10/02/2000	05/20/2002		XX XXX XXX XXX XXX XXX	XX	XXX	XXX	XX XX															
807 Small Scale Processing of Nuclear Material	terial 10/02/2000	01/30/2001	^	X XX																			
808 UWD Depleted LLW & Depleted Ingots	s 10/02/2000	04/17/2002	^	X XXX XXX XXX XXX XXX	X	XXX	XXX	××															
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003	Î	X XXX XXX XXX XXX XXX XXX XXX XXX	X	XXX	XXX	XX XX	XXX	X	×												
810 UWD Planning	10/02/2000	09/30/2003	^	XXX XXX XXX XXX XXX XXX XXX XXX XXX XX	XX	XX	XXX	XX XX	XXX	XX	XXX	XX	×										
811 PPE & SCA Support for UWD Activities	s 07/23/2001	10/16/2003				XXX	XXX	X XXX XXX XXX XXX XXX XXX XXX XXX	XXX	XX	XX	XXXX	×										
812 UWD RCRA Materials	02/04/2002	01/20/2004						X XXX XXX XXX XXX XXX XXX XX	XXX	XX	XXX	XX	XX	×									
813 Feas. Study Processing Uranium Waste		06/18/2003								X	XXX XXX XXX	×											
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005											X	X	XXX XXX XXX XXX XXX XXX XXX	×	XXX	XX	XX				
>1% Enriched M General Labor	Hazwat		54.00	0	0	0	0	0	6 12	12	12	12	۰	0	0	0	0	0	0	0	0		
>1% Enriched M Transportation Labor	Motor Vehicle Operator		18.00	0	0	0	0	0	2		4	4		0	0	0	0	0	0	0	0	0	
>1% Enriched M Procurement	Material Property Control Rep.	Rep.	4.50	0	0	0	0	0	5 1	-	-	-	0	0	0	0	0	0	0	0	0	0	_
>1% Enriched M QA/QC	QA/QC Tech.		4.50	0	0	0	0	0	0.5 1	-	-	-		0	0	0	0	0	0	0	0	0	_
>1% Enriched M Environmental Safety & H Rad Tech	Rad Tech		9.00	0	0	•	0	0	- 2	7	7	8	0	0	0		0	0	0	0	0	0	
>1% Enriched M Operations	Operations Manager		9.00	0		0	0	0	-	_	-	-		0	0		0	0	0	0	0		
<=1% Enriched General Labor	Hazwat		6.00	0		•	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	
<=1% Enriched Transportation Labor	Motor Vehicle Operator		2.00	0		•	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0		
<=1% Enriched Procurement N	Material Property Control Rep.	Rep.	0.60	0	0	0	0	0	0	0	0	0	0.6	0	0		0	0	0	0	0		
<=1% Enriched QA/QC C	QA/QC Tech.		0.60	0	0	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0	0		
<=1% Enriched Environmental Safety & H Rad Tech	Rad Tech		8:1	0			0	0	0		0	0	-	0	0	0	0	0	0	0	0	0	
<=1% Enriched Operations C	Operations Manager		1.00	0	0	0	0	0	0	•	0	0	-	0	0	0	0	0	0	0	0	0	
Reject Misc. Enri General Labor	Hazwat		6 .00	0		0	0	0	0	•	0	0		0	0		0	0	0	0	0	0	
Reject Misc. Enri Transportation Labor	Motor Vehicle Operator		2.00	0	0	•	0	0	0	0	0	0	. 2	0	0	0	0	0	0	0	0	0	
Reject Misc. Enri Procurement	Material Property Control Rep.	Rep.	0.40	0	0	0	0	0	0	•	0	0	•	0	0		0	0	0	0	0	•	
Reject Misc. Enri QA/QC C	QA/QC Tech.		0.40	0		0	0	0	0	0	0	0 0.4	•	0	0	0	0	0	0	0	0	0	
Reject Misc. Enri Environmental Safety & H Rad Tech	Rad Tech		0.50	0	0	0	0	0	0	0	0	0 05	0	0	0		0	0	0	0	0	0	
Reject Misc. Enri Operations	Operations Manager		0.50	0	0	0	0	0	0	0	0	0 05	0	0	0	0	0	0	0	0	0	0	
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Sheet Totals:

MPS # 1JC05 FISSILE METALS

DRIVERS	START DATE	END DATE	<u>-</u> 8	FY 2007	FY 2007 Q1 Q2 Q3 Q4	:	FY 2008 Q1 Q2 Q3	08 Q3 Q4	- 5	FY 2009 Q1 Q2 Q	03 Q3 Q4	- ò	FY 2010 Q1 Q2 Q3 Q4	03 Q	4	9 E	FY 2011 Q1 Q2 Q3	2	
801 Nuclear Materials Summary	10/02/2000	05/20/2002																	
802 Setup of Fac. & Repkg of Uranium Metals	ls 10/02/2000	07/18/2001																	
803 Setup of Fac. & Repkg of < 1% Uranium	10/02/2000	08/30/2001																	
804 Facilities Setup for Repkg > 1 WT% U235	35 10/02/2000	12/27/2001																	
805 Shipment of Nuclear Materials	10/02/2000	01/10/2002																	
806 Nuc. Material Risk/PPE/SCA/Planning/Whs	Vhs 10/02/2000	05/20/2002																	
807 Small Scale Processing of Nuclear Material	rial 10/02/2000	01/30/2001																	
808 UWD Depleted LLW & Depleted Ingots	10/02/2000	04/17/2002																	
809 Enriched Oxide/Metal & Residue	10/02/2000	01/06/2003																	
810 UWD Planning	10/02/2000	09/30/2003							,										
811 PPE & SCA Support for UWD Activities	07/23/2001	10/16/2003																	
812 UWD RCRA Materials	02/04/2002	01/20/2004																	
813 Feas. Study Processing Uranium Waste		06/18/2003																	
814 UWZ Design/Const/Treat/Ship	10/02/2003	09/29/2005										man or o							
General Labor Hazwat	wat		0	0	0	0	0	0	-	0	0		0	0	0	0	0	0	
Transportation Labor	Motor Vehicle Operator		0	0	0	0	0	0	·	0	0		0	0	0	0	0	0	
Procurement Mate	Material Property Control Rep	ol Rep.	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	
QA/QC	QA/QC Tech.		0	0	0	0	0	0	0	0	0		0	0	ō	0	0	0	
Environmental Safety & Health Rad	Rad Tech		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	
Operations Oper	Operations Manager		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
General Labor Hazwat	wat		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	
Transportation Labor Moto	Motor Vehicle Operator		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	
Procurement Mate	Material Property Control Rep	of Rep.	0	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
QA/QC	QA/QC Tech.		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	
Environmental Safety & Health Rad	Rad Tech		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	
Operations Oper	Operations Manager		0	0	0	0	0	0	0	0	0	, ,	0	0	0	0	0	0	
General Labor Hazwat	wat		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Transportation Labor Moto	Motor Vehicle Operator		0	•	0	Ö	0	0	0	0	0		0	0	0	0		0	
Procurement Mate	Material Property Control Rep	ol Rep.	0	0	•	0	0	0	0	0	0		•	0	0	0	0	0	
QA/QC	QA/QC Tech.		0	0	0	0	0	0	0	0	0		0	0	0	0		0	
Environmental Safety & Health Rad	Rad Tech		0	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Operations	Operations Manager		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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Sheet Totals:

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SECTION 3

4.0 ESTIMATE

JUWPA FISSILE EXCEPTED < 1% COMPOUNDS

PBS:	80					uor Fernald,	l, Inc.				DATE	06-Sep-01
WBS: CTRL ACCT: CHARGE NO: COMMENT#:	1.1.J JUWP JUWPA R1-F08-002, 535, E724	E724			ESTIMATE FOR ACTIVI **** STATE: (1 FTE E	ESTIMATE SUPPORT WORKSHEET FOR ACTIVITY BASED ESTIMATING **** STATED IN FY01 DOLLARS **** (1 FTE EQUALS 1747 HOURS)	(SHEET MATING (RS ****				PROJECT MGR CAM: PREPARED BY: FISCAL YEAR:	
Resource: Res Dept:	HAZWAT 946	HAZWAT Overtime:	o	EOC: Class: HOU		LABOR						
Yr Hours: Cum Hours: Yr Total Gost: Cum Total Gost:		Oct 00- Sep 01 3,628.7 3,628.7 104,472	Oct 01- Sep 02 4,070.3 7,699.0 123,344 227,816	Oct 02- Sep 03 0.0 7,699.0 0 227,816	Oct 03- Sep 04 0.0 7,699.0 227,816	Oct 04- Sep 05 0.0 7,699.0 0 227,816	Oct 05- Sep 06 0.0 7,699.0 0 227,816	Oct 06- Sep 07 0.0 7,699.0	Oct 07- Sep 08 0.0 7,699.0 0 227,816	Oct 08- Sep 09 0.0 7,699.0 0	Oct 09- Sep 10 0.0 7,699.0 0	
Resource: Res Dept:	HEOOPR 946	HEAVY EQUIP OPERATOR Overtime:		EOC: Class: HOU		LABOR						
Yr Hours: Cum Hours: Yr Total Gost: Cum Total Cost:		Oct 00- Sep 01 149.5 149.5 4,704	Oct 01- Sep 02 157.5 307.0 5,215	Oct 02- Sep 03 0.0 307.0 9,919	Oct 03- Sep 04 0.0 307.0 0 9,919	Oct 04- Sep 05 0.0 307.0 0	Oct 05- Sep 06 0.0 307.0 0	Oct 06- Sep 07 0.0 307.0 0	Oct 07- Sep 08 0.0 307.0 9,919	Oct 08- Sep 09 0.0 307.0 0	Oct 09- Sep 10 0.0 307.0 0.9919	
Resource: Res Dept:	MAT300 946	MATERIAL OBJCLASS300 Overtime:		EOC: Class: MAT		MATERIAL						
Yr Units: Cum Units: Yr Total Cost: Cum Total Cost:		Oct 00- Sep 01 381,000.0 381,000 381,000	Oct 01- Sep 02 694,317.0 1,075,317.0 713,064 1,094,064	Oct 02- Sep 03 0.0 1,075,317.0 1	Oct 03- Sep 04 0.0 .075,317.0 0	Oct 04- Sep 05 0.0 1,075,317.0 0	Oct 05- Sep 06 0.0 1,075,317.0 0	Oct 06- Sep 07 0.0 1,075,317.0 1,094,064	Oct 07- Sep 08 0.0 1,075,317.0 0	Oct 08- Sep 09 0.0 1,075,317.0 0 1,094,064	Oct 09- Sep 10 0.0 1,075,317.0 0 1,094,064	
Resource: N Res Dept: 9	MPCREP 946	MATL PROP CTRL REP Overtime:		EOC: Class: SAL		LABOR						
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:		Oct 00- Sep 01 262.4 262.4 8,481	Oct 01- Sep 02 525.6 788.0 17,880 26,361	Oct 02- Sep 03 0.0 788.0 0	Oct 03- Sep 04 0.0 788.0 0 26,361	Oct 04- Sep 05 0.0 788.0 0	Oct 05- Sep 06 0.0 788.0 0	Oct 06- Sep 07 0.0 788.0 0	Oct 07- Sep 08 0.0 788.0 0	Oct 08- Sep 09 0.0 788.0 0	Oct 09- Sep 10 0.0 788.0 0 26.361	
Resource: N Res Dept: 9.	MVOOPR 946	MOTOR VEHICLE OPER Overtime:		EOC: Class: HOU		LABOR						

Page 2 of 3

Oct 09-

Oct 08-

Oct 07-

Oct 06-

Oct 03- Oct 04- Oct 05EXCLUDES G/A AND ESCALATION COSTS

Oct 02-

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Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	Sep 01 387.2 387.2 9,556 9,556	Sep 02 666.8 1,054.0 17,322 26,878	Sep 03 0.0 1,054.0 0 26,878	Sep 04 0.0 1,054.0 0 26,878	Sep 05 0.0 1,054.0 0 26,878	Sep 06 0.0 1,054.0 0 26,878	Sep 07 0.0 1,054.0 0 26,878	Sep 08 0.0 1,054.0 0 26,878	Sep 09 0.0 1.054.0 0 26,878	Sep 10 0.0 1,054.0 0 26,878	
SRAND TOTALS:											
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 8,578.2 8,578.2 652,358	Oct 01- Sep 02 12,268.8 20,847.0 1,127,851 1,780,209	Oct 02- Sep 03 0.0 20,847.0 0 1,780,209	Oct 03- Sep 04 0.0 20,847.0 0 1,780,209	Oct 04- Sep 05 0.0 20,847.0 0 1,780,209	Oct 05- Sep 06 0.0 20,847.0 0 1,780,209	Oct 06- Sep 07 0.0 20,847.0 0 1,780,209	Oct 07- Sep 08 0.0 20,847.0 0 1,780,209	Oct 08- Sep 09 0.0 20,847.0 0 1,780,209	Oct 09- Sep 10 0.0 20,847.0 0 1,780,209	

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REVIEW TEAMORTH MADE FOR

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JUWPB FISSILE EXCEPTED & DEPLETED METALS

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09/07/2001

								i				8:29 AM	
PBS:	80				Uor F	Fluor Fernald,	J, Inc.					DATE: 06-Sep-01	ı
WBS: CTRL ACCT:	1.1.J				ESTIMATE SI	ESTIMATE SUPPORT WORKSHEET	SHEET				_	ECT MGR:	
CHARGE NO: COMMENT#:					**** STATED	**** STATED IN FY01 DOLLARS **** (1 FTE EQUALS 1747 HOURS)	ARS **** IRS)				- u u	CAM: Donald Paine PREPARED BY: Mary Stone FISCAL YEAR: 2001-2003	
Resource: Res Dept:	HAZWAT 946	HAZWAT Overtime:	ö	EOC: Class: HOU		LABOR							
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	F. SST:	Oct 00- Sep 01 4,813.5 4,813.5 138,581	Oct 01- Sep 02 14,705.1 19,518.6 445,619 584,200	Oct 02- Sep 03 16,201.8 35,720.3 520,041 1,104,241	Oct 03- Sep 04 0.0 35,720.3 0	Oct 04- Sep 05 0.0 35,720.3 0	Oct 05- Sep 06 0.0 35,720.3 0	Oct 06- Sep 07 0.0 35,720.3 0	Oct 07- Sep 08 0.0 35,720.3 0	Oct 08- Sep 09 0.0 35,720.3 0 1,104,241	Oct 09- Sep 10 0.0 35,720.3 1,104.241		
Resource: Res Dept:	INDHYG 946	INDUSTRIAL HYGIENIST Overtime:		EOC: Class: SAL		LABOR							
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	11	Oct 00- Sep 01 197.7 197.7 9.179	Oct 01- Sep 02 454.4 652.1 22.201 31,380	Oct 02- Sep 03 439.9 1,092.0 22.766 54,146	Oct 03- Sep 04 0.0 1,092.0 54,146	Oct 04- Sep 05 0.0 1,092.0 0 54,146	Oct 05- Sep 06 0.0 1,092.0 0	Oct 06- Sep 07 0.0 1,092.0 0 54,146	Oct 07- Sep 08 0.0 1,092.0 0	Oct 08- Sep 09 0.0 1,092.0 0	Oct 09- Sep 10 0.0 1,092.0 54,146		
Resource: Res Dept:	MAT300 946	MATERIAL OBJCLASS300 Overtime:		EOC: Class: MAT		MATERIAL							
Yr Units: Cum Units: Yr Total Cost: Cum Total Cost:	st:	Oct 00- Sep 01 186,994.9 186,994.9 186,995	Oct 01- Sep 02 507,870.8 694,865.7 521,583 708,578	Oct 02- Sep 03 43,835,4 1,128,701.1 1 467,579 1,166,157	Oct 03- Sep 04 0.0 1,128,701.1 1,166,157	Oct 04- Sep 05 0.0 1,128,701.1 0 1,166,157	Oct 05- Sep 06 0.0 1,128,701.1 0 1,166,157	Oct 06- Sep 07 0.0 1,128,701.1 0 1,166,157	Oct 07- Sep 08 0.0 1,128,701.1 0	Oct 08- Sep 09 0.0 1,128,701.1 0	Oct 09- Sep 10 0.0 1,128,701.1 0 1,166,157		
Resource: Res Dept:	MPCREP 946	MATL PROP CTRL REP Overtime:	EP Class:	EOC:	LABOR	30R							
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	!!	Oct 00- Sep 01 446.3 446.3 14,425 14,425	Oct 01- Sep 02 1,405.7 1,852.0 47,821 62,246	Oct 02- Sep 03 1,642.4 3,494.4 59,182 121,427	Oct 03- Sep 04 0.0 3,494.4 0	Oct 04- Sep 05 0.0 3,494.4 0	Oct 05- Sep 06 0.0 3,494.4 0	Oct 06- Sep 07 0.0 3,494,4 0 121,427	Oct 07- Sep 08 0.0 3,494.4 0 121,427	Oct 08- Sep 09 0.0 3,494.4 0	Oct 09- Sep 10 0.0 3,494.4		
Resource: Res Dept:	MVOOPR 946	MOTOR VEHICLE OPER Overtime:	ER Class:	EOC: ss: HOU	LABOR	Ö.							

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Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	it: 0st;	Oct 00- Sep 01 2,058.9 2,058.9 59,420 59,420	Oct 01- Sep 02 6,648.3 8,707.2 201,957 261,377	Oct 02- Sep 03 8,668.2 17,375.3 278,906 540,283	Oct 03- Sep 04 0.0 17,375.3 0 540,283	Oct 04- Sep 05 0.0 17,375.3 0 540,283	Oct 05- Sep 06 0.0 17,375.3 0 540,283	Oct 06- Sep 07 0.0 17,375.3 0 540,283	Oct 07- Sep 08 0.0 17,375.3 0 540,283	Oct 08- Sep 09 0.0 17,375.3 0 540,283	Oct 09- Sep 10 0.0 17,375.3 0 540,283
Resource: Res Dept:	OPRMGR 946	OPERATIONS MGR Overtime:	Class:	EOC:	LABOR	S.					
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	tt Søt	Oct 00- Sep 01 700.2 700.2 36.604 36.604	Oct 01- Sep 02 2,265.9 2,966.1 124,692	Oct 02- Sep 03 3,186.0 6,152.1 185,701 346,998	Oct 03- Sep 04 0.0 6,152.1 0 346,998	Oct 04- Sep 05 0.0 6.152.1 0	Oct 05- Sep 06 0.0 6,152.1 0	Oct 06- Sep 07 0.0 6,152.1 0	Oct 07- Sep 08 0.0 6.152.1 0	Oct 08- Sep 09 0.0 6,152.1 0	Oct 09- Sep 10 0.0 6,152.1 0 346,998
Resource: Res Dept:	PROWHA 946	PROF WAREHOUSE ATTEN Overtime:	NTTEN Class:	EOC: HOU	LABOR	RO					
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	::	Oct 00- Sep 01 96,4 96,4 2,562 2,562	Oct 01- Sep 02 433.1 529.5 12.112 14,674	Oct 02- Sep 03 867.2 1,396.7 25,688	Oct 03- Sep 04 0.0 1,396.7 0 40,361	Oct 04- Sep 05 0.0 1,396.7 0	Oct 05- Sep 06 0.0 1,396.7 0	Oct 06- Sep 07 0.0 1,396.7 0	Oct 07- Sep 08 0.0 1,396.7 0	Oct 08- Sep 09 0.0 1,396.7 0	Oct 09- Sep 10 0.0 1,396.7 0
Resource: Res Dept:	QACTEC 946	QA/QC TECH Overtime:	Class:	EOC: SAL	LABOR	R.					
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	.: et :	Oct 00- Sep 01 502.7 502.7 15,525 15,525	Oct 01- Sep 02 1,812.5 2,315.3 58,914 74,439	Oct 02- Sep 03 2.617 8 4,933.1 90.126	Oct 03- Sep 04 0.0 4,933.1 164,565	Oct 04- Sep 05 0.0 4,933.1	Oct 05- Sep 06 0.0 4,933.1 0	Oct 06- Sep 07 0.0 4,933.1	Oct 07- Sep 08 0.0 4,933.1 0 164,565	Oct 08- Sep 09 0.0 4,933.1 164,565	Oct 09- Sep 10 0.0 4,933.1
Resource: Res Dept:	RADTEC 946	RAD TECH Overtime:	Class:	EOC: SAL	LABOR	X.					
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	#	Oct 00- Sep 01 1,104.3 1,104.3 37,633	Oct 01- Sep 02 3,462.1 4,566.3 124,191	Oct 02- Sep 03 4,558.8 9,125.1 173,213 335,037	Oct 03- Sep 04 0.0 9,125.1 0 335,037	Oct 04- Sep 05 0.0 9.125.1 0	Oct 05- Sep 06 0.0 9,125.1 0	Oct 06- Sep 07 0.0 9,125.1 0	Oct 07- Sep 08 0.0 9,125.1 0	Oct 08- Sep 09 0.0 9,125.1 0	Oct 09- Sep 10 0.0 9,125.1
Resource: Res Dept:	TRNLAB 946	TRANSPORT LABORER Overtime:	R Class:	EOC: HOU	LABOR	æ					
Yr Hours: Cum Hours:		Oct 00- Sep 01 186.1 186.1	Oct 01. Sep 02 858.7 1,044.7	Oct 02- Sep 03 1,747.4 2,792.1	Oct 03- Sep 04 0.0 2,792.1	Oct 04- Sep 05 0.0 2,792.1	Oct 05- Sep 06 0.0 2,792.1	Oct 06- Sep 07 0.0 2,792.1	Oct 07- Sep 08 0.0 2,792.1	Oct 08- Sep 09 0.0 2,792.1	Oct 09- Sep 10 0.0 2.792.1
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Yr Total Cost. Cum Total Cost:	4,592 4,592	22,306 26,898	48,080 74,978	0 74,978							
GRAND TOTALS:											
	Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04	Oct 05-	Oct 06	Oct 07-	Oct 08-	90	
	Sep 01	Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sen 07	Sen O8	Sen o	Sep 10	
Yr Hours:	10,106.1	32,045.7	39,929.4	0.0	0.0	0.0				01 00	
Cum Hours:	10,106.1	42,151.7	82,081.2	82.081.2	82.081.2	82 081 2	82 081 2	82.081.2	82.081.2	0.00	
Yr Total Cost:	505,515	1,581,396	1,861,282	0	0		1001	2:100:30	2.100,20	2.100,20	
Cum Total Cost:	505,515	2,086,911	3,948,193	3,948,193	3.948.193	3.948.193	3 948 193	3 948 193	3 948 103	3 048 103	

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JUWPC RCRA MATERIAL & SEALED SOURCES

	80			Ī	uor Fe	Fluor Fernald,	, Inc.				DATE		06-Sep-01
WBS: 1 CTRL ACCT: J CHARGE NO: J	1.1.J JUWP JUWPC R1-F08-002, R1-F	1.1.J JUWP JUWPC R1-F08-002, R1-F08-003, 535, E724			ESTIMATE SU FOR ACTIVITY **** STATED I (1 FTE EQU	ESTIMATE SUPPORT WORKSHEET FOR ACTIVITY BASED ESTIMATING **** STATED IN FY01 DOLLARS **** (1 FTE EQUALS 1747 HOURS)	SHEET ATING SS ****				PROJI CAM: PREP,	ECT MGR: ARED BY: L YEAR:	Donald Paine Donald Paine Mary Stone 2002-2003
Resource: E Res Dept: 9	ENSTEC 946	ENVIR SCIENTIST TECH Overtime:		EOC: Class: SAL	LABOR	SO.							
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:		Oct 00- Sep 01 0.0 0.0	Oct 01- Sep 02 250.0 250.0 7,452	Oct 02- Sep 03 0.0 250.0 0 7,452	Oct 03- Sep 04 0.0 250.0 0	Oct 04- Sep 05 0.0 250.0 0	Oct 05- Sep 06 0.0 250.0 7.452	Oct 06- Sep 07 0.0 250.0 0	Oct 07- Sep 08 0.0 250.0 0	Oct 08- Sep 09 0.0 250.0 0 7,452	Oct 09- Sep 10 0.0 250.0 7,452		
Resource: H Res Dept: 94	HAZWAT 946	HAZWAT Overtime:	ō	EOC: Class: HOU	LABOR	OR							
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:		Oct 00- Sep 01 0.0 0.0	Oct 01- Sep 02 4,552.1 4,552.1 137,946 137,946	Oct 02- Sep 03 14,429.9 18,982.0 463,167 601,113	Oct 03- Sep 04 0.0 18,982.0 0	Oct 04- Sep 05 0.0 18,982.0 0	Oct 05- Sep 06 0.0 18,982.0 0	Oct 06- Sep 07 0.0 18,982.0 0	Oct 07- Sep 08 0.0 18,982.0 0	Oct 08- Sep 09 0.0 18,982.0 0	Oct 09- Sep 10 0.0 18,982.0 0 601,113		
Resource: HI Res Dept: 94	HEOOPR 946	HEAVY EQUIP OPERATOR Overtime:		EOC: Class: HOU	LABOR	RO R							
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:		0ct 00- Sep 01- 0.0 0.0 0	Oct 01- Sep 02 0.0 0.0	Oct 02- Sep 03 218:0 218:0 7,646 7,646	Oct 03- Sep 04 0.0 218.0 7,646	Oct 04- Sep 05 0.0 218.0 7,646	Oct 05- Sep 06 0.0 218.0 0	Oct 06- Sep 07 0.0 218.0 0	Oct 07- Sep 08 0.0 218.0 0	Oct 08- Sep 09 0.0 218.0 7,646	Oct 09- Sep 10 0.0 218.0 0 7,646		
Resource: INDI Res Dept: 946	INDHYG 946	INDUSTRIAL HYGIENIST Overtime:		EOC: Class: SAL	LABOR	J.							
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:		Oct 00- Sep 01 0.0 0.0 0	Oct 01- Sep 02 0.0 0.0	Oct 02- Sep 03 218.0 218.0 11,282	Oct 03- Sep 04 0.0 218.0 0	Oct 04- Sep 05 0.0 218.0 0	Oct 05- Sep 06 0.0 218.0 0	Oct 06- Sep 07 0.0 218.0 0	Oct 07- Sep 08 0.0 218.0 0	Oct 08- Sep 09 0.0 218.0 0	Oct 09- Sep 10 0.0 218.0 0		
Resource: MA	MAT300	MATERIAL OBJCLASS300	SS300	EOC	MATE	MATERIAL							

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	Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
Yr Units:	Sep 01	Sep 02 154 882 2	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
Cum Units:	0.0	154,882.2	351,123.0	351,123.0	351,123.0	351,123.0	351,123.0	0.0 351,123.0	0.0 351,123.0	0.0 351,123.0
Yr Total Cost: Cum Total Cost:	00	159,064 159,064	206,981 366,045	0 366,045	0 366,045	0 366.045	0 366.045	366.045	366 045	366 045
							<u> </u>			
Resource: MPCREP	P CTRL	REP	EOC		LABOR					
		Class:								
	Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
Yr Hours:	Sep 01	Sep 02 214 6	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
Cum Hours:	0.0	214.6	1,222.0	1,222.0	1,222.0	1,222.0	1,222.0	1,222.0	1,222.0	0.0 1,222.0
Yr Total Cost: Cum Total Cost:	00	7,300	36,301 43,601	0 43,601	0 43,601	0 43,601	0 4 3,601	0 43,601	43,601	43,601
Resource: MVOOPR Res Dept: 946	MOTOR VEHICLE OI Overtime:	OPER Class:	EOC:		LABOR					
	Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
Yr Hours:	0.0	1,763.0	3,461.0	0.0	0.0	0.0	0.0 0.0	oeb 09	Sep us 0.0	Sep 10 0.0
Cum Hours: Yr Total Gost:	0.0	1,763.0	5,224.0	5,224.0	5,224.0	5,224.0	5,224.0	5,224.0	5,224.0	5,224.0
Cum Total Cost:	00	53,554	164,916	164,916	164,916	0 164,916	0 164,916	0 164,916	0 164,916	0 164,916
Resource: OPRMGR Res Dept: 946	OPERATIONS MGR Overtime:	Class:	EOC:		LABOR					
	Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08	Oct 09-
Yr Hours	Sep 01	Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
Cum Hours:	0.0	1,142.0	2,502.0	2,502.0	2,502.0	0.0 2,502.0	0.0 2,502.0	0.0 2,502.0	0.0 2,502.0	0.0 2,502.0
Cum Total Cost:	00	62,843	142,113	142,113	142,113	0 142,113	0 142,113	0 142,113	0 142,113	0 142,113
Resource: PROWHA Res Dept: 946	PROF WAREHOUSE ATTEN Overtime:	ATTEN Class:	EOC: HOU		LABOR					
Yr Hours:	Oct 00- Sep 01	Oct 01- Sep 02 67 6	Oct 02- Sep 03	Oct 03- Sep 04	Oct 04- Sep 05	Oct 05- Sep 06	Oct 06- Sep 07	Oct 07- Sep 08	Oct 08- Sep 09	Oct 09- Sep 10
Cum Hours: Yr Total Cost:	0.0	67.6 1,891	161.0 2,767	161.0	0.0 161.0 0	0.0 161.0 0	0.0 161.0 0	0.0 161.0 0	0.0 161.0 0	0.0 161.0 0
Cum Total Cost:	0	1,891	4,657	4,657	4,657	4,657	4,657	4,657	4,657	4,657
Resource: QACTEC Res Dept: 946	QA/QC TECH Overtime:	Class:	EOC: SAL		LABOR					
Yr Hours:	Oct 00- Sep 01 0.0	Oct 01- Sep 02 269.4	Oct 02- Sep 03 1,142.6	Oct 03- Sep 04 0.0	Oct 04- Sep 05 0.0	Oct 05- Sep 06 0.0	Oct 06- Sep 07 0.0	Oct 07- Sep 08 0.0	Oct 08- Sep 09 0.0	Oct 09- Sep 10 0.0
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Cum Hours: Yr Total Cost: Cum Total Cost:	0.0	269.4 8.757 8.757	1,412.0 39,337 48,094	1,412.0 0 48,094	1,412.0 0 48,094	1,412.0 0 48,094	1,412.0 0 48,094	1,412.0 0 48,094	1,412.0 0 48,094	1,412.0 0 48,094	
Resource: RADTEC Res Dept: 946	RAD TECH Overtime:	Class:	EOC:	LABOR	SOR S						
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 0.0 0.0 0	Oct 01- Sep 02 403.6 403.6 14,476	Oct 02- Sep 03 2,318.4 2,722.0 88,090	Oct 03- Sep 04 0.0 2,722.0 0	Oct 04- Sep 05 0.0 2,722.0 102,567	Oct 05- Sep 06 0.0 2,722.0 0	Oct 06- Sep 07 0.0 2,722.0 0	Oct 07- Sep 08 0.0 2,722.0 0	Oct 08- Sep 09 0.0 2,722.0 0	Oct 09- Sep 10 0.0 2.722.0 0	
Resource: SERVSUB Res Dept: 946	SUBS Overtime:	Class:	EOC:		SUBCONTRACTORS	W					
Yr Units: Cum Units: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 0.0 0.0 0	Oct 01- Sep 02 150,000.0 150,000.0 154,050	Oct 02- Sep 03 18,962.2 168,962.2 20,000	Oct 03- Sep 04 0.0 168,962.2 0 174,050	Oct 04- Sep 05 0.0 168,962.2 0	Oct 05- Sep 06 0.0 168,962.2 0	Oct 06- Sep 07 0.0 168,962.2 0	Oct 07- Sep 08 0.0 168,962.2 0 174,050	Oct 08- Sep 09 0.0 168,962.2 0 174,050	Oct 09- Sep 10 0.0 168,962.2 0	
Resource: TRNLAB Res Dept: 946	TRANSPORT LABORER Overtime:	RER Class:	EOC: HOU	LABOR	OR						
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 0.0 0.0 0	Oct 01- Sep 02 134.8 134.8 3,503	Oct 02- Sep 03 185.2 320.0 5,095 8,598	Oct 03- Sep 04 0.0 320.0 0 8,598	Oct 04- Sep 05 0.0 320.0 0 8,598	Oct 05- Sep 06 0.0 320.0 8,598	Oct 06- Sep 07 0.0 320.0 8.598	Oct 07- Sep 08 0.0 320.0 8,598	Oct 08- Sep 09 0.0 320.0 8,598	Oct 09- Sep 10 0.0 320.0 8,598	
GRAND TOTALS: Yr Hours: Vr Total Cost: Cum Total Cost:	Oct 00- Sep 01 0.0 0.0 0	Oct 01- Sep 02 8,797.1 8,797.1 610,836 610,836	Oct 02- Sep 03 24,433.9 33,231.0 1,071,297	Oct 03- Sep 04 0.0 33,231.0 0,1,682,134	Oct 04- Sep 05 0.0 33,231.0 1,682,134	Oct 05- Sep 06 0.0 33,231.0 1,682,134	Oct 06- Sep 07 0.0 33,231.0 0.1,682,134	Oct 07- Sep 08 0.0 33,231.0 1,682,134	Oct 08- Sep 09 0.0 33,231.0 1,682,134	Oct 09- Sep 10 0.0 33,231.0 1,682,134	

EXCLUDES G/A AND ESCALATION COSTS

JUWPD FISSILE COMPOUNDS

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Page 1 of 2	yf 2											09/07/2001	/07/2001 8-31 AM
PBS:	80				uor Fe	Fluor Fernald, Inc.	, Inc.				PA	DATE: 06-Sep-01	5
WBS: CTRL ACCT: CHARGE NO:	1.1.J JUWP				ESTIMATE SUI FOR ACTIVITY	ESTIMATE SUPPORT WORKSHEET FOR ACTIVITY BASED ESTIMATING	HEET				P. C. A.	PROJECT MGR: Donald Paine CAM: Donald Paine	aine
COMMENT#:	. 1	8-003, 535			(1 FTE EQU	(1 FTE EQUALS 1747 HOURS)	(S)				PR FIS	PREPARED BY: Mary Stone FISCAL YEAR: 2002-2003	33 33
Resource:	HAZWAT	HAZWAT		Ċ	a ca w	g							
Res Dept:	946	Overtime:	ö	Class: HOU		Š							
		Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-		
Yr Hours:		0.0	1,320.4	3,919.6	0.0	oep 03	o:0 0:0	/0 des	Sep 08 ეე	Sep 09	Sep 10		
Cum Hours:		0.0	1,320.4	5,240.0	5,240.0	5,240.0	5,240.0	5,240.0	5,240.0	5,240.0	5,240.0		
Triotal Cost: Cum Total Cost:	n: ost:	00	40,013 40,013	125,810 165,823	0 165,823	0 165,823	0 165,823	0 165,823	0 165,823	0 165,823	0 165,823		
Resource:	HEOOPR	HEAVY EQUIP OPERATOR		EOC:	LABOR	S.							
Res Dept:	946	Overtime:	Cia	Class: HOU									
		Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-		
,		Sep 01	Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10		
Cum Hours:		0.0	440.8 440.8	1,306.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Yr Total Cost:	ı.	0	14,597	45,814	0	0	0.74	0.747,1	1,747.0	1,747.0	1,747.0		
Cum Total Cost:	ost:	0	14,597	60,411	60,411	60,411	60,411	60,411	60,411	60,411	60,411		
Resource:	INDHYG	INDUSTRIAL HYGIENIST	NIST	FOC	LABOR	S.							
Res Dept:	946	Overtime:		Class: SAL									
		Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04	Oct 05-	6	Oct 07.	a to	Ö		
:		Sep 01	Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10		
Yr Hours: Cum Hours		0.0	440.8	1,306.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Yr Total Cost:		0	21,538	67,600	0.747,1	0.747,1	0,747,0	1,747.0	1,747.0	1,747.0	1,747.0		
Cum Total Cost:	st:	0	21,538	89,138	89,138	89,138	89,138	89,138	89,138	89,138	89,138		
Resource:	MAT300	MATERIAL OBJCLASS300	58300	EOC	MATE	MATERIAL							
Res Dept:	946	Overtime:	Class:	ss: MAT		!							
		Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-		
Yr Units:		0.0	10,502.0	0.0	0.0	3ep 03 0.0	3ep 09 0:0	sep 0.0 0.0	Sep 08	Sep 09	Sep 10		
Cum Units:		0.0	10,502.0	10,502.0	10,502.0	10,502.0	10,502.0	10,502.0	10,502.0	10,502.0	10,502.0		
Tr Total Cost: Cum Total Cost:	st:	0 0	10,786 10,786	0 10,786	0 10,786	0 10,786	0 10,786	0 10,786	0 10,786	0 10,786	0 10,786		
Resource: Res Dept:	MVOOPR 946	MOTOR VEHICLE OPER Overtime:	PER Class:	EOC: HOU	LABOR	ĸ							

Oct 09-Sep 10 0.0 1,747.0

Oct 08-Sep 09 0.0 1,747.0

Oct 07-Sep 08 0 55,418

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0.0 1,747.0 0 55,418

Oct 06-Sep 07 0.0 1,747.0 0 55,418

Oct 04-Sep 05 0.0 1,747.0 0 55,418

Oct 03-Sep 04 0.0 1,747.0

Oct 02-Sep 03 1,306.2 1,747.0 42,028 55,418

Oct 01-Sep 02 440.8 440.8 13,390

Oct 00-Sep 01 0.0 0.0

0 55,418 LABOR

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Class:

OPERATIONS MGR

OPRMGR 946

Resource: Res Dept:

Cum Total Cost:

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Cum Hours:

Yr Hours:

Oct 05-Sep 06 0.0 1,747.0 0 55,418 Oct 09-Sep 10 0.0

Oct 07-Sep 08 0.0

Oct 06-Sep 07 0.0 1,747.0

Oct 05-Sep 06 0.0 1,747.0

Oct 04-Sep 05 0.0 1,747.0

Oct 03-Sep 04 0.0 1,747.0 0

Oct 02-Sep 03 1,306.2 1,747.0 76,134

Oct 01-Sep 02 440.8 440.8 24,257 24,257

Oct 00-Sep 01 0.0

1,747.0 0 100,391

Oct 08-Sep 09 0.0 1,747.0

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RAD TECH Overtime:

RADTEC 946

Resource: Res Dept:

Cum Total Cost:

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Oct 09-Sep 10

Oct 08-Sep 09 0.0 1,747.0 0 65,442

Oct 07-Sep 08

Oct 06-Sep 07

Oct 05-Sep 06 0.0 1,747.0

Oct 04-Sep 05 0.0 1,747.0 0 65,442

Oct 03-Sep 04 0.0 1,747.0 0 65,442

Oct 02-Sep 03 1,306.2 1,747.0 49,630 65,442

Oct 01-Sep 02 440.8 440.8 15,812

Oct 00-Sep 01 0.0 0.0

GRAND TOTALS:

Cum Total Cost:

Yr Total Cost:

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Oct 09-Sep 10 0.0

Oct 08-Sep 09 0.0 13,975.0

Oct 07-Sep 08 0.0 13,975.0

Oct 06-Sep 07 0.0 13,975.0

Oct 05-Sep 06 0.0 13,975.0

Oct 04-Sep 05 0.0

Oct 03-Sep 04 0.0 13,975.0

Oct 02-Sep 03 10,450.6 13,975.0 407,017 547,409

Oct 01-Sep 02 3,524.4 3,524.4 140,392

Oct 00-Sep 01 0.0 0.0

Cum Total Cost:

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EXCLUDES G/A AND ESCALATION COSTS

JUWPE FISSILE METALS

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09/07/2001

PBS: 08				·luor	Fluor Fernald,	d, Inc.				DATE	9	5
WBS: 1.1.J				ESTIMATE	ESTIMATE SUBBOBT WORKSHEET	Veueer					n-dec-on	5
CTRL ACCT: JUWP				FOR ACTIN	FOR ACTIVITY BASED ESTIMATING	MATING				PROJ CAM:	ECT MGR:	Donald Paine Donald Paine
	35			TATE (1 FTE I	STATED IN FY01 DOLLARS (1 FTE EQUALS 1747 HOURS)	ARS **** 'URS)				PREP FISCA	PREPARED BY: Mary Stone FISCAL YEAR: 2001-2005	Stone 2005
Resource: HAZWAT Res Dept: 946	HAZWAT Overtime:	o	EOC: Class: HOU		LABOR							
Yr Hours	Oct 00- Sep 01	Oct 01- Sep 02	Oct 02- Sep 03	Oct 03- Sep 04	Oct 04- Sep 05	Oct 05- Sep 06	Oct 06- Sep 07	Oct 07- Sep 08	Oct 08- Sep 09	Oct 09- Sep 10		
Cum Hours: Yr Total Cost:	333.0 9,588	3,916.0 10,251.0 300,552	22,796.0 33,049.0 731,764	33,049.0 0	33,049.0 0	33,049.0 0	33,049.0 0.0	0.0 33,049.0 0	0.0 33,049.0 0	0.0 33,049.0 0		
Cum Total Cost:	9,588	310,140	1,041,905	1,041,905	1,041,905	1,041,905	1,041,905	1,041,905	1,041,905	1,041,905		
Resource: INDHYG Res Dept: 946	INDUSTRIAL HYGIENIST Overtime:		EOC: Class: SAL		LABOR							
Yr Hours:	Oct 00- Sep 01 111.0	Oct 01- Sep 02 381.8	Oct 02- Sep 03 381.1	Oct 03- Sep 04 0.0	Oct 04- Sep 05 0.0	Oct 05- Sep 06 0.0	Oct 06- Sep 07 0.0	Oct 07- Sep 08	Oct 08- Sep 09	Oct 09- Sep 10		
Cum Hours: Yr Total Cost: Cum Total Cost:	111.0 5,153 5,153	492.9 18,657 23,810	874.0 19,726 43,536	874.0 0 43,536	874.0 0 43,536	874.0 0 43,536	874.0 0 43,536	874.0 0 43,536	874.0 0 43,536	874.0 0 43,536		
Resource: MAT300 Res Dept: 946	MATERIAL OBJCLASS300 Overtime:		EOC: Class: MAT		MATERIAL							
Yr Units: Cum Units: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 0.0 0.0 0	Oct 01- Sep 02 342,440.3 342,440.3 351,686 351,686	Oct 02- Sep 03 976,529.7 1,318,970.0 1,029,974 1,381,660	Oct 03- Sep 04 0.0 1,318,970.0 0 1,381,660	Oct 04- Sep 05 0.0 1,318,970.0 0	Oct 05- Sep 06 0.0 1,318,970.0 0	Oct 06- Sep 07 0.0 1,318,970.0 1,381,660	Oct 07- Sep 08 0.0 1,318,970.0 0 1,381,660	Oct 08- Sep 09 0.0 1,318,970.0 0	Oct 09- Sep 10 0.0 1,318,970.0 0 1,381,660		
Resource: MPCREP Res Dept: 946	MATL PROP CTRL REP Overtime:		EOC: Class: SAL		LABOR							
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	Oct 00- Sep 01 0.0 0.0	Oct 01- Sep 02 796.1 796.1 27,083	Oct 02- Sep 03 2,296.9 3,093.0 82,765	Oct 03- Sep 04 0.0 3,093.0 0	Oct 04- Sep 05 0.0 3.093.0 109,848	Oct 05- Sep 06 0.0 3,093.0 0	Oct 06- Sep 07 0.0 3,093.0 0	Oct 07- Sep 08 0.0 3,093.0 0	Oct 08- Sep 09 0.0 3,093.0 0	Oct 09- Sep 10 0.0 3,093.0 0		
Resource: MVOOPR Res Dept: 946	MOTOR VEHICLE OPER Overtime:		EOC: Class: HOU		LABOR							

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		Oct 00-	Oct 01-	Oct 02-	Oct 03-	0ct 0 4	Oct 05-	Oct 06-	Oct 07-	Oct 08-	Oct 09-
Yr Hours:		Sep 01	Sep 02	Sep 03	Sep 04	Sep 05	Sep 06	Sep 07	Sep 08	Sep 09	Sep 10
Cum Hours:		111.0	4,139.4	14,706.0	14,706.0	14,706.0	14,706.0	0.0 14,706.0	0.0 14,706.0	0.0 14,706.0	0.0 14,706.0
Cum Total Cost:	;;	3,204	122,373 . 125,576	339,988 465,565	0 465,565	0 465,565	0 465,565	0 465,565	0 465,565	0 465,565	0 465,565
Resource: Res Dept:	OPRMGR 946	OPERATIONS MGR Overtime:	Class:	EOC:	LABOR	S.					
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	ي	Oct 00- Sep 01 111.0 111.0 5.804	Oct 01- Sep 02 1,472.9 1,583.9 81,050 86,854	Oct 02- Sep 03 3.584.1 5,168.0 208,906 295,760	Oct 03- Sep 04 0.0 5,168.0 0	Oct 04- Sep 05 0.0 5,168.0 0	Oct 05- Sep 06 0.0 5,168.0 0 295,760	Oct 06- Sep 07 0.0 5,168.0 0 295,760	Oct 07- Sep 08 0.0 5,168.0 0 295,760	Oct 08- Sep 09 0.0 5,168.0 0 295,760	Oct 09- Sep 10 0.0 5,168.0 0 295,760
Resource: Res Dept:	PROWHA 946	PROF WAREHOUSE ATTEN Overtime:	ATTEN Class:	EOC: HOU	LABOR	R.					
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:	יי	0ct 00- Sep 01 0.0 0.0 0	Oct 01- Sep 02 233.9 233.9 6.540 6.540	Oct 02- Sep 03 712.1 946.0 21.096 27,636	Oct 03- Sep 04 0.0 946.0 0 27,636	Oct 04- Sep 05 0.0 946.0 0	Oct 05- Sep 06 0.0 946.0 0 27,636	Oct 06- Sep 07 0.0 946.0 0 27,636	Oct 07- Sep 08 0.0 946.0 0 27,636	Oct 08- Sep 09 0.0 946.0 0 27,636	Oct 09- Sep 10 0.0 946.0 27,636
Resource: Res Dept:	QACTEC 946	QA/QC TECH Overtime:	Class:	EOC:	LABOR	ĸ					
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:		Oct 00- Sep 01 0.0 0.0 0	Oct 01- Sep 02 1,091.0 1,091.0 35,462 35,462	Oct 02- Sep 03 2.985.0 4,076.0 102,767	Oct 03- Sep 04 0.0 4,076.0 0	Oct 04- Sep 05 0.0 4,076.0 138,229	Oct 05- Sep 06 0.0 4,076.0 0	Oct 06- Sep 07 0.0 4,076.0 0	Oct 07- Sep 08 0.0 4,076.0 0	Oct 08- Sep 09 0.0 4,076.0 0	Oct 09- Sep 10 0.0 4,076.0 138,229
Resource: Res Dept:	RADTEC 946	RAD TECH Overtime:	Class:	EOC: SAL	LABOR	ŭ					
Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost:		Oct 00- Sep 01 111.0 111.0 3.783	Oct 01- Sep 02 2,202.0 2,313.1 78,992 82,775	Oct 02- Sep 03 5,258.0 7,571.0 282,553	Oct 03- Sep 04 0.0 7,571.0 0	Oct 04- Sep 05 0.0 7,571.0 0 282,553	Oct 05- Sep 06 0.0 7,571.0	Oct 06- Sep 07 0.0 7,571.0 0	Oct 07- Sep 08 0.0 7,571.0 0	Oct 08- Sep 09 0.0 7,571.0 0	Oct 09- Sep 10 0.0 7,571.0 0
Resource: S	SERVSUB 946	SUBS Overtime:	Class:	EOC: SUB	SUBC	SUBCONTRACTORS	W				
Yr Units: Cum Units:	Units: n Units:	Oct 00- Sep 01 0.0	Oct 01- Sep 02 778,967.9 1,3: 778,967.9 2,14	Oct 02- Sep 03 1,374,760.7 2,30. 2,153,728.6 4,456	Oct 03- Sep 04 2,305,717.1 4,4,459,445.6 9,	Oct 04- Sep 05 4,639,246.3 9,098,692.0	Oct 05- Sep 06 0.0 9,098,692.0	Oct 06- Sep 07 0.0 9,098,692.0	Oct 07- Sep 08 0.0 9,098,692.0	Oct 08- Sep 09 0.0 9,098,692.0	Oct 09- Sep 10 0.0 9,098,692.0

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	0 9,921,000		Oct 09- Sep 10 0.0 1,893.0 51,368 Oct 09- Sep 10 0.0 71,376.0 0.375.0
	0 9,921,000		Oct 08- Sep 09 0.0 1,893.0 51,368 Oct 08- Sep 09 0.0 71,376.0 13,759,060
	0 9,921,000		Oct 07- Sep 08 0.0 1.893.0 51,368 Cot 07- Sep 08 0.0 71,376.0 0
	0 9,921,000		Oct 06- Sep 07 0.0 1.893.0 51,368 0ct 06- Sep 07 0.0 71,376.0 6
	0 9,921,000		Oct 05- Sep 06 0.0 1,893.0 51,368 0ct 05- Sep 06 0,71,376.0 13,759,060
	5,171,000 9,921,000	LABOR	Oct 04- Sep 05- 0.0 1,893.0 0.51,368 Cot 04- Sep 05- 0.0 71,376.0 5,171,000
	2,500,000	_	Oct 03- Sep 04- 00 1,893.0 0 51,388 Oct 03- Sep 04- 00 71,376.0 2,500,000 8,588,060
	1,450,000 2,250,000	EOC: Class: HOU	Oct 02- Sep 03 1,426.3 1,893.0 39,218 51,368 Oct 02- Sep 03 50,007.1 71,376.0 4,225,983 6,088,060
	800,000		Oct 01- Sep 02 467.7 467.7 12.150 12.150 12.150 20.591.8 21.368.9 1.834.545
	0 0	TRANSPORT LABORER Overtime:	Oct 00- Sep 01 0.0 0.0 0.0 0 0 0 0 777.1 777.1 777.1 27.532 27.532
Page 3 of 3	Yr Total Cost: Cum Total Cost:	· Resource: TRNLAB Res Dept: 946	Yr Hours: Cum Hours: Yr Total Cost: Cum Total Cost: GRAND TOTALS: Yr Hours: Yr Hours: Yr Total Cost: Cum Total Cost:

REVIEW TEAM THE AND TH

CONTROL TEAM

SECTION 3 5.0 RISK PLAN

Risk/Opportunity Identification and Analysis Form

		Risk Handling Strategy	7 Accept	2 Accept	2 Accept	1 Accept	9 Accept	2 Accept	3 Accept	4 Accept	2 Avoid
		Risk Critical Valuo		Tr divinish denderation dender						A THE STATE OF THE	**************************************
\$21,717,005		Probable Cost \$ (Likeliest Case)	\$3,000,000	\$388,000	\$376,000	\$50,000	\$4,750,000	\$75,000	\$500,000	\$750,000	\$180,000
980);		Risk Probability Lavel	0	20 2	0	0	0	2	0	ę	e e
Total Baseline Dollars (Minimum Case):		Risk Probability %	40	3	2 60	10	50	2 10	3 60	60	2 40
Total Baseline (liisk impact Lovel	00	06	00	000	30	00	00	00	Q 30°
		Impact Cost 9 (Maximum Case)	\$7,500,000	\$1,940,000	\$750,000	\$500,000	000'005'6\$	\$750,000	\$1,000,000	\$1,500,000	\$450,000
	r: JUWP	internal Or External Driver	Internal	Internal	Internal	Internal	Internal	Internal	External	Internal	Internal
PBS Number: 8	Wes rumber: 1.1.3.C Control Account Numbers	rotettial impaci	Additional cost for treatment of added RCRA inventory	\$5000/drum for 388 drums	Additional cost for design, construction, start-up and operation of a size reduction process.	Additional cost for packaging , shipment , and off-site treatment of decant water,	Additional cost for enrichment blending at an off-site facility to meet the NTS WAC.	Additional schedule and cost to relocate the packaging operations to another FEMP facility	4 month schodule delay	12 month schedule delay, edditional project support	3 month schedule delay, additional support cost and labor cost.
1000	8		Reject product material is declared waste, and subsequent charecterization deems it to be hazardous waste requiring treatment prior to disposal.	Required treatment of waste not recharacterized on RCRA	Oversized materials require Additional cost for design, construction start-up and opera of a size reduction process.	Decant water can not be dispositioned through AWWT	LLW is material	als		Project schedule extention 1 due to complications c associated with s repackaging and stipment of uranium materials.	SSR required for a packaging start-up a s
Project: Uranium Waste Disposition (UWD)			UWD RCItA Inventory	RCRA waste treatment		_	Enriched material co- packaging with LLW	Waste packaging in FEMP FEMP building not available for mater packaging		UWD project support	Wasto packaging

85 CB risk reviews

Risk/Opportunity Identification and Analysis Form

The first field 20, 2001 Wils Number 1 Just 6	Project: Uranium Waste Disposition (UWD)	Visposition (VWD)	PBS Number: 8			Total Baseline Do	Total Baseline Dollars (Minimum Case):	aso);	\$21,717,005	005	***************************************	Г
Post Post	A. Nelling	Date: April 26, 2001	WBS Number: 1.1.J.C					***************************************	***************************************			Т
	rrost	Date: April 26, 2001	Control Account Number	r: JUWP					***************************************			Т
	nsk	Risk and/or Opportunity	Potential Impact	Internal Or	Impact Cost 8	Risk Impact Level	Risk Probability	Risk Probability	Probable Cost \$	Risk Critical	Risk Handling	
Hericase an include costs Hericase in cast Hericase Hericase in cast Hericase				External Driver	(Maximum Caso)		8	Level	(Likeliost Caso)	Value	Strategy	
Well account levels (1859) Account levels (1859)	Waste charactorization	Increase enalytical cost and increased number of samples required for charactorization	soldn	Internal	\$300,000			01		000	2 Accept	
Further decounting and process to be most of the feature and state of	cceptance at NFS		1	Internal	\$1,000,000	***************************************	Territorio de la constanta de	01	And Andrew Common Language gas as common	0000		1
Waste continent Weste continent Waste continent Weste cont	oil Blending Rt.F08-003	Eniched compounds can not be blended in WPRAP process to meet DOT and/or. Envirocate requirements		Internal	\$5,500,000			0		OC	8 Accept	T
Additional requirements & Slov down tile Total Solve down to state and cost for the material	ackaging	Waste container procurement or delivery delays		Internal	\$450,000			0		000	3 Accept	1
Since trained Schedule and cost Internal 34,100,000 3 40 2 \$1,940,000 3	Process changes for hydrogen generating & pyrophoric material	Additional requirements & costly steps to movement and packaging operations		Internal	\$688,000	New york of the commence of th	A	0		300	2 Accept	1
RCRA treatment off-site	Repackaging compounds cost more due to unknowns in the material and/or Vacuum Transfer Equipment does not work as expected	Slower, manual repackaging of the material	le and cost	Internal	\$4, 100,000					000	3 Accept	T .
RCRA treatment off-site Additional cost for rot feesible start-up and operation of a RCRA treatment process. NTS can not accept fissile Additional blonding at meet the NTS WAC. Characterization of the Schedule and cost External \$2,800,000 3 30 2 \$4,000,000 Additional cost for disposal Additional cost for meet the NTS WAC. Characterization of the Schedule and cost External \$2,800,000 3 30 2 \$840,000 Additional cost for disposal st for disposal cost for d				Total:	\$35.928.000			Total			***************************************	7 6
RCRA treatment off-site Additional cost for a final statement off-site additional cost for fastible and operation of the REMP sealed sources will impact the additional cost for the additional cost for the factor of the factor					nacional and and and and and and and and and and			1 10181;	1700071	looi		7
Waste for disposel enrichment blending at enr	RA treatement	RCRA treatment off-site not feasible	e	External	\$10,000,000			Managaman proprieta pri de processora de a constanta de la con		000	10	
Characterization of the Schedule and cost External \$2,800,000 3 30 2 \$840,000 have to be done.	sposal	NTS can not accept fissilo waste for disposal	Additional cost for enrichment blending at an off-site facility to meet the NTS WAC.	External	\$8,500,000	9				000	9	1
	nd ization of sealed annot be utilized MP population of	Characterization of the FEMP sealed sources will have to be done.	le and cost	External	\$2,800,000	S.				000	3	